

INCH-POUND

MIL-M-38510/338B
10 February 2004
SUPERSEDING
MIL-M-38510/338A
22 May 1990

MILITARY SPECIFICATION

MICROCIRCUITS, DIGITAL, BIPOLAR, ADVANCED SCHOTTKY TTL,
ARITHMETIC LOGIC UNITS, MONOLITHIC SILICON

Reactivated after 10 February 2004 and may be used for either new or existing design acquisition.

This specification is approved for use by all Departments
and Agencies of the Department of Defense.

The requirements for acquiring the product herein shall consist of this specification sheet and MIL-PRF 38535

1. SCOPE

1.1 Scope. This specification covers the detail requirements for monolithic silicon, advanced Schottky TTL, arithmetic logic units. Two product assurance classes and a choice of case outlines and lead finishes are provided for each type and are reflected in the complete part number. For this product, the requirements of MIL-M-38510 have been superseded by MIL-PRF-38535, (see 6.3).

1.2 Part or Identifying Number (PIN). The PIN is in accordance with MIL-PRF-38535, and as specified herein.

1.2.1 Device types. The device types are as follows:

<u>Device type</u>	<u>Circuit</u>
01	4-bit arithmetic logic unit
02	Carry look-a-head generator
03	4-bit arithmetic logic unit
04	4-bit arithmetic logic unit

1.2.2 Device class. The device class is the product assurance level as defined in MIL-PRF-38535.

1.2.3 Case outlines. The case outlines are as designated in MIL-STD-1835 and as follows:

<u>Outline letter</u>	<u>Descriptive designator</u>	<u>Terminals</u>	<u>Package style</u>
E	GDIP1-T16 or CDIP2-T16	16	Dual-in-line
F	GDFP2-F16 or CDFP3-F16	16	Flat pack
J	GDIP1-T24 or CDIP2-T-24	24	Dual-in-line
K	GDFP2-F24 or CDFP3-F24	24	Flat pack
L	GDIP3-T24 or CDIP4-T24	24	Dual-in-line
R	GDIP1-T20 or CDIP2-T20	20	Dual-in-line
S	GDFP2-F20 or CDFP3-F20	20	Flat pack
3	CQCC1-N28	28	Square leadless chip carrier
2	CQCC1-N20	20	Square leadless chip carrier

Comments, suggestions, or questions on this document should be addressed to: Commander, Defense Supply Center Columbus, ATTN: DSCC-VAS, 3990 East Broad St., Columbus, OH 43216-5000, or emailed to bipolar@dscclia.mil. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at www.dodssp.daps.mil.

AMSC N/A

FSC 5962

1.3 Absolute maximum ratings.

Supply voltage range	-0.5 V dc to +7.0 V dc
Input voltage range	-1.2 V dc at -18 mA to +7.0 V dc
Storage temperature range	-65° to +150°C
Maximum power dissipation, per device (P_D) <u>1/</u>	
Device type 01	358 mW
Device type 02	198 mW
Device type 03	490 mW
Device type 04	446 mW
Lead temperature (soldering, 10 seconds)	+300°C
Thermal resistance, junction to case (θ_{JC})	(See MIL-STD-1835)
Junction temperature (T_J) <u>2/</u>	175°C

1.4 Recommended operating conditions.

Supply voltage (V_{CC})	4.5 V minimum to 5.5 V maximum
Minimum high level input voltage (V_{IH})	2.0 V dc
Maximum low level input voltage (V_{IL})	0.8 V dc
Normalized fanout (each output) <u>3/</u> :	
Low level	33 maximum
High level	50 maximum
Case operating temperature range (T_C)	-55° to +125°C

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3, 4, or 5 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements of documents cited in sections 3, 4, or 5 of this specification, whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications and Standards. The following specifications and standards form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract.

DEPARTMENT OF DEFENSE SPECIFICATIONS

MIL-PRF-38535 - Integrated Circuits (Microcircuits) Manufacturing, General Specification for.

DEPARTMENT OF DEFENSE STANDARDS

MIL-STD-883 - Test Method Standard for Microelectronics.
MIL-STD-1835 - Interface Standard Electronic Component Case Outlines

(Copies of these documents are available online at <http://assist.daps.dla.mil/quicksearch/> or www.dodssp.daps.mil or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

1/ Must withstand the added P_D due to short-circuit test (e.g., I_{OS}).

2/ Maximum junction temperature shall not be exceeded except in accordance with allowable short duration burn-in screening condition in accordance with MIL-PRF-38535.

3/ The device shall fanout in both high and low levels to specified number of inputs of the same device type as that being tested.

2.3 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Qualification. Microcircuits furnished under this specification shall be products that are manufactured by a manufacturer authorized by the qualifying activity for listing on the applicable qualified manufacturers list before contract award (see 4.3 and 6.4).

3.2 Item requirements. The individual item requirements shall be in accordance with MIL-PRF-38535 and as specified herein or as modified in the device manufacturer's Quality Management (QM) plan. The modification in the QM plan shall not affect the form, fit, or function as described herein.

3.3 Design, construction, and physical dimensions. The design, construction, and physical dimensions shall be as specified in MIL-PRF-38535 and herein.

3.3.1 Terminal connections. The terminal connections shall be as specified on figure 1.

3.3.2 Truth tables. The truth tables shall be as specified on figure 2.

3.3.3 Logic diagrams. The logic diagrams shall be as specified on figure 3.

3.3.4 Schematic circuits. The schematic circuits shall be maintained by the manufacturer and made available to the qualifying activity and the preparing activity upon request.

3.3.3 Case outlines. The case outlines shall be as specified in 1.2.3.

3.4 Lead material and finish. The lead material and finish shall be in accordance with MIL-PRF-38535 (see 6.6).

3.5 Electrical performance characteristics. The electrical performance characteristics are as specified in table I, and apply over the full recommended case operating temperature range, unless otherwise specified.

3.6 Electrical test requirements. The electrical test requirements for each device class shall be the subgroups specified in table II. The electrical tests for each subgroup are described in table III.

3.7 Marking. Marking shall be in accordance with MIL-PRF-38535.

3.8 Microcircuit group assignment. The devices covered by this specification shall be in microcircuit group number 11 (see MIL-PRF-38535, appendix A).

4. VERIFICATION

4.1 Sampling and inspection. Sampling and inspection procedures shall be in accordance with MIL-PRF-38535 or as modified in the device manufacturer's Quality Management (QM) plan. The modification in the QM plan shall not effect the form, fit, or function as described herein.

4.2 Screening. Screening shall be in accordance with MIL-PRF-38535 and shall be conducted on all devices prior to qualification and quality conformance inspection. The following additional criteria shall apply:

- a. The burn-in test duration, test condition, and test temperature, or approved alternatives shall be as specified in the device manufacturer's QM plan in accordance with MIL-PRF-38535. The burn-in test circuit shall be maintained under document control by the device manufacturer's Technology Review Board (TRB) in accordance with MIL-PRF-38535 and shall be made available to the acquiring or preparing activity upon request. The test circuit shall specify the inputs, outputs, biases, and power dissipation, as applicable, in accordance with the intent specified in test method 1015 of MIL-STD-883.
- b. Interim and final electrical test parameters shall be as specified in table II, except interim electrical parameters test prior to burn-in is optional at the discretion of the manufacturer.
- c. Additional screening for space level product shall be as specified in MIL-PRF-38535.

4.3 Qualification inspection. Qualification inspection shall be in accordance with MIL-PRF-38535.

4.4 Technology Conformance inspection (TCI). Technology conformance inspection shall be in accordance with MIL-PRF-38535 and herein for groups A, B, C, and D inspections (see 4.4.1 through 4.4.4).

4.4.1 Group A inspection. Group A inspection shall be in accordance with table III of MIL-PRF-38535 and as follows:

- a. Tests shall be as specified in table II herein.
- b. Subgroups 4, 5, and 6 shall be omitted.

4.4.2 Group B inspection. Group B inspection shall be in accordance with table II of MIL-PRF-38535.

4.4.3 Group C inspection. Group C inspection shall be in accordance with table IV of MIL-PRF-38535 and as follows:

- a. End-point electrical parameters shall be as specified in table II herein.
- b. The steady-state life test duration, test condition, and test temperature, or approved alternatives shall be as specified in the device manufacturer's QM plan in accordance with MIL-PRF-38535. The burn-in test circuit shall be maintained under document control by the device manufacturer's Technology Review Board (TRB) in accordance with MIL-PRF-38535 and shall be made available to the acquiring or preparing activity upon request. The test circuit shall specify the inputs, outputs, biases, and power dissipation, as applicable, in accordance with the intent specified in test method 1005 of MIL-STD-883.

4.4.4 Group D inspection. Group D inspection shall be in accordance with table V of MIL-PRF-38535. End-point electrical parameters shall be as specified in table II herein.

4.5 Methods of inspection. Methods of inspection shall be specified as follows:

4.5.1 Voltage and current. All voltages given are referenced to the microcircuit ground terminal. Currents given are conventional and positive when flowing into the referenced terminal.

TABLE I. Electrical performance characteristics.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C	Device type	Limits		Unit
				Min	Max	
High level output voltage	V _{OH}	V _{CC} = 4.5 V, V _{IL} = 0.8 V, I _{OH} = -1.0 mA, V _{IH} = 2.0 V	All	2.5		V
Low level output voltage	V _{OL}	V _{CC} = 4.5 V, I _{OH} = 20 mA, V _{IH} = 2.0 V, V _{IL} = 0.8 V	All		0.5	V
Input clamp voltage	V _{IC}	V _{CC} = 4.5 V, I _{IN} = -18 mA, T _C = +25°C	All		-1.2	V
High level input current	I _{IH1}	V _{CC} = 5.5 V, V _{IN} = 2.7 V	All		20	μA
	I _{IH2}	V _{CC} = 5.5 V, V _{IN} = 7.0 V	All		100	μA
Low level input current	I _{IL1}	V _{CC} = 5.5 V, V _{IL} = 0.5 V	01	-0.03	-0.6	mA
			02	-0.12	-1.2	
			03, 04	-0.12	-0.6	
	I _{IL2}		01	-0.09	-2.4	mA
			01, 02, 03	-0.10	-2.4	
	I _{IL3}		01	-0.12	-3.6	mA
			02	-0.48	-3.6	
	I _{IL4}		01	-0.15	-4.8	mA
			02	-0.6	-4.8	
	I _{IL5}		02	-3.5	-8.4	mA
I _{IL6}	02	-4.0	-9.6	mA		
Short circuit output current <u>1/</u>	I _{OS}	V _{CC} = 5.5 V, V _{OS} = 0 V	All	-60	-150	mA
Output drive current	I _{OD}	V _{CC} = 4.5 V, V _{OUT} = 2.5 V V _{IN} = 5.5 V	All	60		mA
Supply current	I _{CCL}	V _{CC} = 5.5 V	01		65	mA
			02		36	
	I _{CCH}		01		65	mA
			02		28	
	I _{CC}		03		89	mA
			04		89	

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C	Device type	Limits		Unit
				Min	Max	
Propagation delay time low to high level, <u>2/</u>		V _{CC} = 5.0 V, C _L = 50 pF ± 10%, See figure 4				
$\bar{A}_i$ or $\bar{B}_i$ to $\bar{F}_i$ mode = sum	t _{PLH1}		01	3.0	14.5	ns
Any $\bar{A}$ or $\bar{B}$ to any $\bar{F}$ mode = sum	t _{PLH2}		01	3.0	16.5	ns
$\bar{A}$ or $\bar{B}$ to C _n + 4 mode = sum	t _{PLH3}		01	5.0	17.0	ns
$\bar{A}$ or $\bar{B}$ to $\bar{P}$ mode = sum	t _{PLH4}		01	2.5	9.5	ns
C _n to $\bar{F}$	t _{PLH5}		01	2.5	16.0	ns
$\bar{A}$ or $\bar{B}$ to $\bar{G}$ mode = sum	t _{PLH6}		01	2.5	10.0	ns
C _n to C _n + 4	t _{PLH7}		01	3.0	11.5	ns
$\bar{A}_i$ or $\bar{B}_i$ to $\bar{F}_i$ mode = dif	t _{PLH8}		01	3.0	17.5	ns
$\bar{A}$ or $\bar{B}$ to $\bar{F}$ mode = logic	t _{PLH9}		01	3.0	14.5	ns
Any $\bar{A}$ or $\bar{B}$ to any $\bar{F}$ mode = dif	t _{PLH10}		01	3.0	17.5	ns
$\bar{A}$ or $\bar{B}$ to $\bar{G}$ mode = dif	t _{PLH11}		01	2.5	11.5	ns
$\bar{A}$ or $\bar{B}$ to C _n + 4 mode = dif	t _{PLH12}		01	5.0	18.5	ns
$\bar{A}$ or $\bar{B}$ to $\bar{P}$ mode = dif	t _{PLH13}		01	2.5	11.0	ns
$\bar{A}$ or $\bar{B}$ to A = B mode = dif	t _{PLH14}		01	8.0	35.0	ns

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions $-55^{\circ}\text{C} \leq T_C \leq +125^{\circ}\text{C}$	Device type	Limits		Unit
				Min	Max	
Cn to Cn + x, Cn + 4, Cn + z	t_{PLH1}	$V_{CC} = 5.0 \text{ V}$, $C_L = 50 \text{ pF} \pm 10\%$, See figure 4	02	3.0	11.5	ns
$\bar{P} 0$, $\bar{P} 1$ or $\bar{P} 2$ to Cn + x, Cn + y, or Cn + z	t_{PLH2}		02	2.0	10.5	ns
$\bar{G} 0$, $\bar{G} 1$ or $\bar{G} 2$ to Cn + x, Cn + y, or Cn + z	t_{PLH3}		02	2.0	11.0	ns
$\bar{P} 1$, $\bar{P} 2$ or $\bar{P} 3$ to $\bar{G}$	t_{PLH4}		02	2.0	12.0	ns
$\bar{G} n$ to $\bar{G}$	t_{PLH5}		02	2.5	12.0	ns
$\bar{P} n$ to $\bar{P}$	t_{PLH6}		02	2.5	10.0	ns
Ci to Fi	t_{PLH1}		03	2.5	15.0	ns
Ai to Fi	t_{PLH2}		03	3.0	17.0	ns
Bi to Fi	t_{PLH3}		03	3.0	17.0	ns
Si to Fi	t_{PLH4}		03	3.0	21.0	ns
Ai to $\bar{G}$	t_{PLH5}		03	3.0	13.5	ns
Bi to $\bar{G}$	t_{PLH6}		03	3.0	13.0	ns
Ai to $\bar{P}$	t_{PLH7}		03	2.0	14.0	ns
Bi to $\bar{P}$	t_{PLH8}		03	2.0	14.0	ns
Si to $\bar{G}$	t_{PLH9}		03	3.0	17.0	ns
Si to $\bar{P}$	t_{PLH10}		03	3.0	16.0	ns

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C	Device type	Limits		Unit
				Min	Max	
Cn to Fi	t _{PLH1}	V _{CC} = 5.0 V, C _L = 50 pF ± 10%, See figure 4	04	3.0	15.0	ns
Ai to Fi	t _{PLH2}		04	4.0	18.0	ns
Bi to Fi	t _{PLH3}		04	4.0	18.0	ns
Si to Fi	t _{PLH4}		04	4.0	23.5	ns
Ai to OVR	t _{PLH5}		04	6.0	18.5	ns
Bi to OVR	t _{PLH6}		04	6.0	18.5	ns
Ai to Cn + 4	t _{PLH7}		04	3.5	11.5	ns
Bi to Cn + 4	t _{PLH8}		04	3.5	11.5	ns
Si to OVR	t _{PLH9}		04	5.0	19.5	ns
Si to Cn + 4	t _{PLH10}		04	6.5	19.5	ns
Cn to Cn + 4	t _{PLH11}		04	2.0	11.0	ns
Cn to OVR	t _{PLH12}		04	3.0	14.0	ns
Propagation delay time high to low level, <u>2</u> /						
$\bar{A}$ i or $\bar{B}$ i to $\bar{F}$ i mode = sum	t _{PHL1}		01	3.0	14.5	ns
Any $\bar{A}$ or $\bar{B}$ to any $\bar{F}$ mode = sum	t _{PHL2}		01	3.0	14.0	ns

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C	Device type	Limits		Unit
				Min	Max	
$\bar{A}$ or $\bar{B}$ to Cn + 4 mode = sum	t _{PHL3}	V _{CC} = 5.0 V, C _L = 50 pF ± 10%, See figure 4	01	3.5	16.5	ns
$\bar{A}$ or $\bar{B}$ to $\bar{P}$ mode = sum	t _{PHL4}		01	3.0	10.0	ns
Cn to $\bar{F}$	t _{PHL5}		01	2.5	12.0	ns
$\bar{A}$ or $\bar{B}$ to $\bar{G}$ mode = sum	t _{PHL6}		01	2.5	10.0	ns
Cn to Cn + 4	t _{PHL7}		01	3.0	10.0	ns
$\bar{A}$ i or $\bar{B}$ i to $\bar{F}$ i mode = dif	t _{PHL8}		01	3.0	14.5	ns
$\bar{A}$ or $\bar{B}$ to $\bar{F}$ mode = logic	t _{PHL9}		01	3.0	15.5	ns
Any $\bar{A}$ or $\bar{B}$ to any $\bar{F}$ mode = dif	t _{PHL10}		01	3.0	16.0	ns
$\bar{A}$ or $\bar{B}$ to $\bar{G}$ mode = dif	t _{PHL11}		01	2.5	12.5	ns
$\bar{A}$ or $\bar{B}$ to Cn + 4 mode = dif	t _{PHL12}		01	4.0	17.0	ns
$\bar{A}$ or $\bar{B}$ to $\bar{P}$ mode = dif	t _{PHL13}		01	2.5	11.5	ns
$\bar{A}$ or $\bar{B}$ to A = B mode = dif	t _{PHL14}		01	5.5	21.0	ns
Cn to Cn + x, Cn + y, Cn + z	t _{PHL1}		02	2.5	11.0	ns
$\bar{P}$ 0, $\bar{P}$ 1 or $\bar{P}$ 2 to Cn + x, Cn + y, or Cn + z	t _{PHL2}		02	1.0	7.0	ns
$\bar{G}$ 0, $\bar{G}$ 1 or $\bar{G}$ 2 to Cn + x, Cn + y, or Cn + z	t _{PHL3}		02	1.0	7.0	ns
$\bar{P}$ 1, $\bar{P}$ 2 or $\bar{P}$ 3 to $\bar{G}$	t _{PHL4}		02	2.5	10.0	ns

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C	Device type	Limits		Unit
				Min	Max	
$\overline{G}_n$ to $\overline{G}$	t _{PHL5}	V _{CC} = 5.0 V, C _L = 50 pF ± 10%, See figure 4	02	2.5	10.0	ns
$\overline{P}_n$ to $\overline{P}$	t _{PHL6}		02	1.5	8.0	ns
Ci to Fi	t _{PHL1}		03	2.5	12.0	ns
Ai to Fi	t _{PHL2}		03	3.0	15.0	ns
Bi to Fi	t _{PHL3}		03	3.0	16.0	ns
Si to Fi	t _{PHL4}		03	3.0	16.0	ns
Ai to $\overline{G}$	t _{PHL5}		03	3.0	13.5	ns
Bi to $\overline{G}$	t _{PHL6}		03	3.0	13.5	ns
Ai to $\overline{P}$	t _{PHL7}		03	3.0	12.5	ns
Bi to $\overline{P}$	t _{PHL8}		03	3.0	12.5	ns
Si to $\overline{G}$	t _{PHL9}		03	3.0	18.0	ns
Si to $\overline{P}$	t _{PHL10}		03	3.0	18.0	ns
Cn to Fi	t _{PHL1}		04	2.5	11.0	ns
Ai to Fi	t _{PHL2}		04	3.5	14.0	ns
Bi to Fi	t _{PHL3}		04	3.5	14.0	ns
Si to Fi	t _{PHL4}		04	4.0	16.5	ns
Ai to OVR	t _{PHL5}		04	5.0	14.5	ns

See footnotes at end of table.

TABLE I. Electrical performance characteristics - Continued.

Test	Symbol	Conditions -55°C ≤ T _C ≤ +125°C	Device type	Limits		Unit
				Min	Max	
Bi to OVR	t _{PHL6}	V _{CC} = 5.0 V, C _L = 50 pF ± 10%, See figure 4	04	5.0	14.5	ns
Ai to Cn + 4	t _{PHL7}		04	3.5	14.5	ns
Bi to Cn + 4	t _{PHL8}		04	3.5	14.5	ns
Si to OVR	t _{PHL9}		04	5.0	19.0	ns
Si to Cn + 4	t _{PHL10}		04	5.0	17.5	ns
Cn to Cn + 4	t _{PHL11}		04	2.0	12.0	ns
Cn to OVR	t _{PHL12}		04	2.5	13.0	ns

1/ Not more than one output should be shorted at a time.

2/ In Ai, Bi, Fi, and Si, i = 0, 1, 2, or 3.

TABLE II. Electrical test requirements.

MIL-PRF-38535 test requirements	Subgroups (see table III)	
	Class S devices	Class B devices
Interim electrical parameters	1	1
Final electrical test parameters	1*, 2, 3, 7, 9, 10, 11	1*, 2, 3, 7, 9
Group A test requirements	1, 2, 3, 7, 8, 9, 10, 11	1, 2, 3, 7, 8, 9, 10, 11
Group B electrical test parameters when using the method 5005 QCI option	1, 2, 3, 7, 8, 9, 10, 11	N/A
Group C end-point electrical parameters	1, 2, 3, 7, 8, 9, 10, 11	1, 2, 3
Group D end-point electrical parameters	1, 2, 3	1, 2, 3

*PDA applies to subgroup 1.

Terminal number	Device type 01		Device type 02		Device 03	Device 04
	Cases J, K, and L	Case 3	Cases E and F	Case 2	Cases R, S, and 2	Cases R, S, and 2
1	$\bar{B}0$	N/C	$\bar{G}1$	N/C	A1	A1
2	$\bar{A}0$	$\bar{B}0$	$\bar{P}1$	$\bar{G}1$	B1	B1
3	S3	$\bar{A}0$	$\bar{G}0$	$\bar{P}1$	A0	A0
4	S2	S3	$\bar{P}0$	$\bar{G}0$	B0	B0
5	S1	S2	$\bar{G}3$	$\bar{P}0$	S0	S0
6	S0	S1	$\bar{P}3$	N/C	S1	S1
7	Cn	S0	$\bar{P}$	$\bar{G}3$	S2	S2
8	M	N/C	GND	$\bar{P}3$	F0	F0
9	$\bar{F}0$	Cn	Cn + z	$\bar{P}$	F1	F1
10	$\bar{F}1$	M	$\bar{G}$	GND	GND	GND
11	$\bar{F}2$	$\bar{F}0$	Cn + y	N/C	F2	F2
12	GND	$\bar{F}1$	Cn + x	Cn + z	F3	F3
13	$\bar{F}3$	$\bar{F}2$	Cn	$\bar{G}$	$\bar{G}$	OVR
14	A = B	GND	$\bar{G}2$	Cn + y	$\bar{P}$	Cn + 4
15	$\bar{P}$	N/C	$\bar{P}2$	Cn + x	Cn	Cn
16	Cn + 4	$\bar{F}3$	V _{CC}	N/C	B3	B3
17	$\bar{G}$	A = B		Cn	A3	A3
18	$\bar{B}3$	$\bar{P}$		$\bar{G}2$	B2	B2
19	$\bar{A}3$	Cn + 4		$\bar{P}2$	A2	A2
20	$\bar{B}2$	$\bar{G}$		V _{CC}	V _{CC}	V _{CC}
21	$\bar{A}2$	$\bar{B}3$				
22	$\bar{B}1$	N/C				
23	$\bar{A}1$	$\bar{A}3$				
24	V _{CC}	$\bar{B}2$				
25		$\bar{A}2$				
26		$\bar{B}1$				
27		$\bar{A}1$				
28		V _{CC}				

FIGURE 1. Terminal connections.

Device type 01

Mode select inputs				Active LOW operands & Fn Outputs		Active High operands & Fn Outputs	
S3	S2	S1	S0	Logic (M = H)	Arithmetic** (M = L) (Cn = L)	Logic (M = H)	Arithmetic** (M = L) (Cn = H)
L	L	L	L	$\overline{A}$	A minus 1	$\overline{A}$	A
L	L	L	H	$\overline{AB}$	AB minus 1	$\overline{A+B}$	A + B
L	L	H	L	$\overline{A} + B$	$A\overline{B}$ minus 1	$\overline{A} B$	A + $\overline{B}$
L	L	H	H	Logic 1	minus 1	Logic 0	minus 1
L	H	L	L	$\overline{A+B}$	A plus (A + $\overline{B}$)	$\overline{AB}$	A plus $A\overline{B}$
L	H	L	H	$\overline{B}$	AB plus (A + $\overline{B}$)	$\overline{B}$	(A + B) plus $A\overline{B}$
L	H	H	L	$\overline{A \oplus B}$	A minus B minus 1	$A \oplus B$	A minus B minus 1
L	H	H	H	$A + \overline{B}$	A + $\overline{B}$	$A\overline{B}$	$A\overline{B}$ minus 1
H	L	L	L	$\overline{A} B$	A plus (A + B)	$\overline{A} + B$	A plus AB
H	L	L	H	$A \oplus B$	A plus B	$\overline{A \oplus B}$	A plus B
H	L	H	L	B	$A\overline{B}$ plus (A + B)	B	(A + $\overline{B}$) plus AB
H	L	H	H	A + B	A + B	AB	AB minus 1
H	H	L	L	Logic 0	A plus A*	Logic 1	A plus A*
H	H	L	H	$A\overline{B}$	AB plus A	$A + \overline{B}$	(A + B) plus A
H	H	H	L	AB	$A\overline{B}$ minus A	A + B	(A + $\overline{B}$) plus A
H	H	H	H	A	A	A	A minus 1

* Each bit is shifted to the next more significant position.

** Arithmetic operations expressed in 2's complement notation.

H = HIGH voltage level.

L = LOW voltage level.

FIGURE 2. Truth tables.

Device type 02

Inputs									Outputs				
Cn	$\bar{G} 0$	$\bar{P} 0$	$\bar{G} 1$	$\bar{P} 1$	$\bar{G} 2$	$\bar{P} 2$	$\bar{G} 3$	$\bar{P} 3$	Cn + x	Cn + y	Cn + z	$\bar{G}$	$\bar{P}$
X	H	H							L				
L	H	X							L				
X	L	X							H				
H	X	L							H				
X	X	X	H	H						L			
X	H	H	H	X						L			
L	H	X	H	X						L			
X	X	X	L	X						H			
X	L	X	X	L						H			
H	X	L	X	L						H			
X	X	X	X	X	H	H					L		
X	X	X	H	H	H	X					L		
X	H	H	H	X	H	X					L		
L	H	X	H	X	H	X					L		
X	X	X	X	X	L	X					H		
X	X	X	L	X	X	L					H		
X	L	X	X	L	X	L					H		
H	X	L	X	L	X	L					H		
	X		X	X	X	X	H	H				H	
	X		X	X	H	H	H	X				H	
	X		H	H	H	X	H	X				H	
	H		H	X	H	X	H	X				H	
	X		X	X	X	X	L	X				L	
	X		X	X	L	X	X	L				L	
	X		L	X	X	L	X	L				L	
	L		X	L	X	L	X	L				L	
		H		X		X		X					H
		X		H		X		X					H
		X		X		H		X					H
		X		X		X		H					H
		L		L		L		L					L

H = HIGH voltage level

L = LOW voltage level

X = Immaterial

FIGURE 2. Truth tables - Continued.

Device type 03

Function	Inputs						Outputs					
	S0	S1	S2	Cn	An	Bn	F0	F1	F2	F3	$\bar{G}$	$\bar{P}$
Clear	0	0	0	X	X	X	0	0	0	0	0	0
B minus A	1	0	0	0	0	0	1	1	1	1	1	0
				0	0	1	0	1	1	1	0	0
				0	1	0	0	0	0	0	1	1
				0	1	1	1	1	1	1	1	0
				1	0	0	0	0	0	0	1	0
				1	0	1	1	1	1	1	0	0
				1	1	0	1	0	0	0	1	1
				1	1	1	0	0	0	0	1	0
A minus B	0	1	0	0	0	0	1	1	1	1	1	0
				0	0	1	0	0	0	0	1	1
				0	1	0	0	1	1	1	0	0
				0	1	1	1	1	1	1	1	0
				1	0	0	0	0	0	0	1	0
				1	0	1	1	0	0	0	1	1
				1	1	0	1	1	1	1	0	0
				1	1	1	0	0	0	0	1	0
A plus B	1	1	0	0	0	0	0	0	0	0	1	1
				0	0	1	1	1	1	1	1	0
				0	1	0	1	1	1	1	1	0
				0	1	1	0	1	1	1	0	0
				1	0	0	1	0	0	0	1	1
				1	0	1	0	0	0	0	1	0
				1	1	0	0	0	0	0	1	0
				1	1	1	1	1	1	1	0	0
$A \oplus B$	0	0	1	X	0	0	0	0	0	0	1	1
				X	0	1	1	1	1	1	1	1
				X	1	0	1	1	1	1	1	0
				X	1	1	0	0	0	0	0	0
A + B	1	0	1	X	0	0	0	0	0	0	1	1
				X	0	1	1	1	1	1	1	1
				X	1	0	1	1	1	1	1	1
				X	1	1	1	1	1	1	1	0
AB	0	1	1	X	0	0	0	0	0	0	0	0
				X	0	1	0	0	0	0	1	1
				X	1	0	0	0	0	0	0	0
				X	1	1	1	1	1	1	1	0
Preset	1	1	1	X	0	0	1	1	1	1	1	1
				X	0	1	1	1	1	1	1	1
				X	1	0	1	1	1	1	1	1
				X	1	1	1	1	1	1	1	0

1 = HIGH voltage level

0 = LOW voltage level

X = Immaterial

FIGURE 2. Truth tables - Continued.

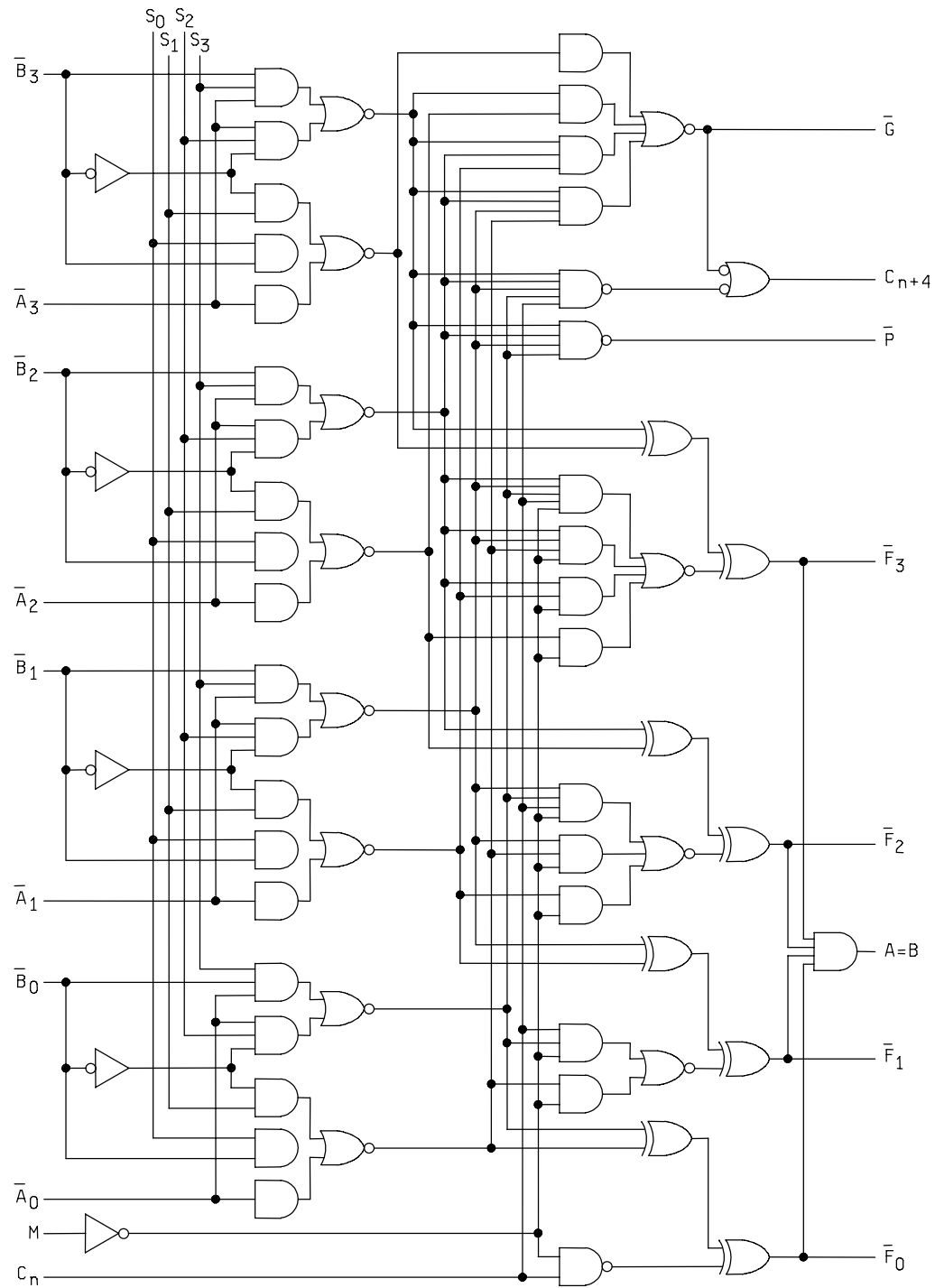
Device type 04

Function	Inputs						Outputs					
	S0	S1	S2	Cn	An	Bn	F0	F1	F2	F3	OVR	Cn + 4
Clear	0	0	0	0	X	X	0	0	0	0	1	1
				1	X	X	0	0	0	0	1	1
B minus A	1	0	0	0	0	0	1	1	1	1	0	0
				0	0	1	0	1	1	1	0	1
				0	1	0	0	0	0	0	0	0
				0	1	1	1	1	1	1	0	0
				1	0	0	0	0	0	0	0	1
				1	0	1	1	1	1	1	0	1
				1	1	0	1	0	0	0	0	0
				1	1	1	0	0	0	0	0	1
A minus B	0	1	0	0	0	0	1	1	1	1	0	0
				0	0	1	0	0	0	0	0	0
				0	1	0	0	1	1	1	0	1
				0	1	1	1	1	1	1	0	0
				1	0	0	0	0	0	0	0	1
				1	0	1	1	0	0	0	0	0
				1	1	0	1	1	1	1	0	1
				1	1	1	0	0	0	0	0	1
A plus B	1	1	0	0	0	0	0	0	0	0	0	0
				0	0	1	1	1	1	1	0	0
				0	1	0	1	1	1	1	0	0
				0	1	1	0	1	1	1	0	1
				1	0	0	1	0	0	0	0	0
				1	0	1	0	0	0	0	0	1
				1	1	0	0	0	0	0	0	1
				1	1	1	1	1	1	1	0	1
A $\oplus$ B	0	0	1	X	0	0	0	0	0	0	0	0
				X	0	1	1	1	1	1	0	0
				0	1	0	1	1	1	1	0	0
				X	1	1	0	0	0	0	1	1
				1	1	0	1	1	1	1	1	1
A + B	1	0	1	X	0	0	0	0	0	0	0	0
				X	0	1	1	1	1	1	0	0
				X	1	0	1	1	1	1	0	0
				0	1	1	1	1	1	1	0	0
				1	1	1	1	1	1	1	1	1
AB	0	1	1	X	0	0	0	0	0	0	1	1
				X	0	1	0	0	0	0	0	0
				X	1	0	0	0	0	0	1	1
				0	1	1	1	1	1	1	0	0
				1	1	1	1	1	1	1	1	1
Preset	1	1	1	X	0	0	1	1	1	1	0	0
				X	0	1	1	1	1	1	0	0
				X	1	0	1	1	1	1	0	0
				0	1	1	1	1	1	1	0	0
				1	1	1	1	1	1	1	1	1

1 = HIGH voltage level
0 = LOW voltage level
X = Immaterial

FIGURE 2. Truth tables - Continued.

DEVICE TYPE 01

FIGURE 3. Logic diagram.

DEVICE TYPE 02

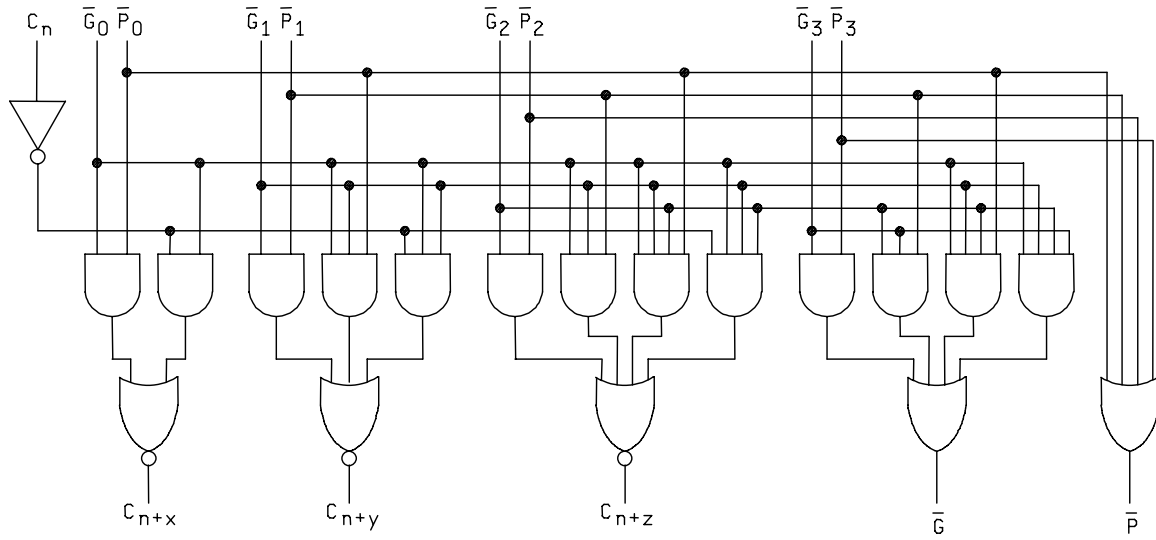
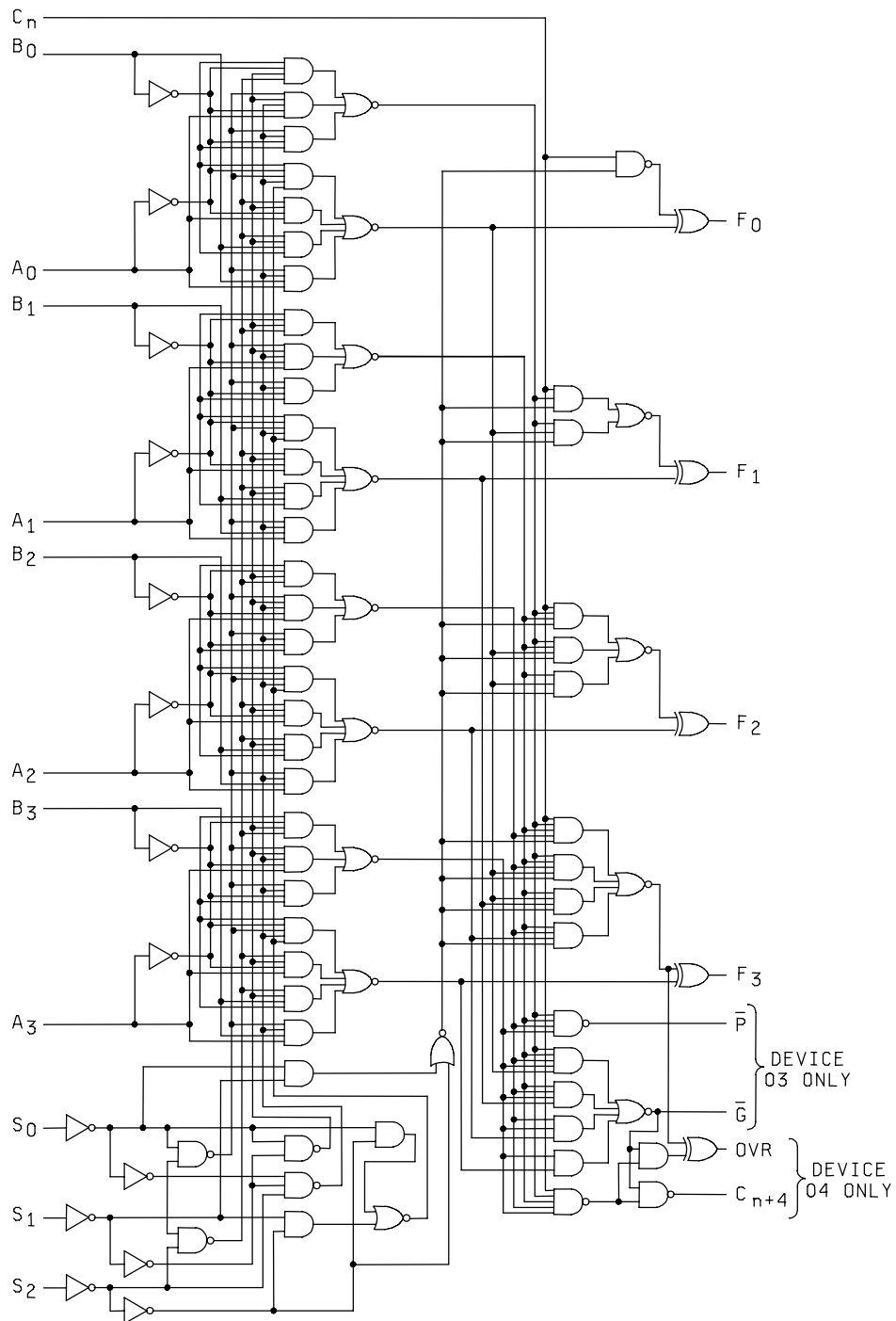
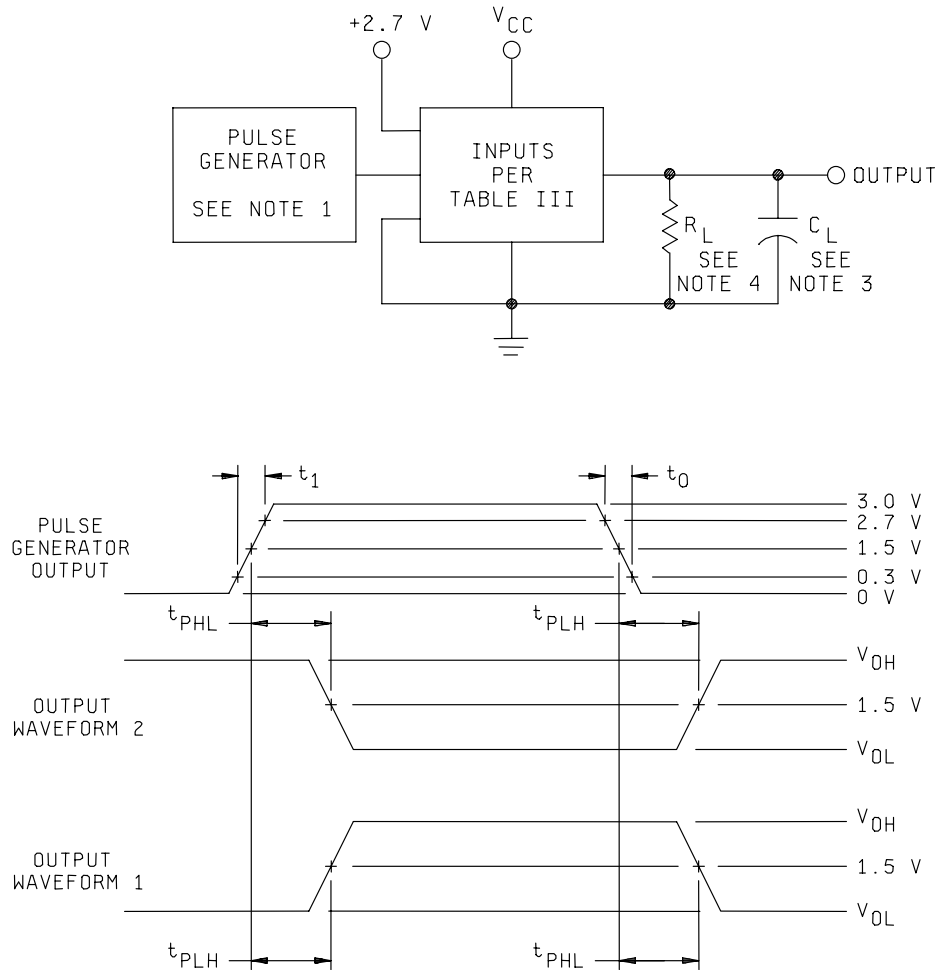


FIGURE 3. Logic diagram - Continued.

DEVICE TYPES 03 AND 04

FIGURE 3. Logic diagram - Continued.



NOTES:

1. Pulse generator has the following characteristics: $t_1 = t_0 \leq 2.5$ ns, $PRR \leq 1$ MHz, $Z_{OUT} \approx 50\Omega$.
2. Inputs not under test are at ground.
3. $C_L = 50$ pF $\pm 10\%$.
4. $R_L = 499\Omega \pm 5\%$.
5. Voltage measurements are to be made with respect to network ground terminal.

FIGURE 4. Switching time waveforms (circuit for all device types).

TABLE III. Group A inspection for device type 01.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit			
				Case 3 J/	Test no.	B 0	A 0	S3	S2	S1	S0	Cn	M	F 0	F 1		F 2	GND		Min	Max	
1 Tc = 25°C	V _{OH}	3006	883	1	0.8 V	0.8 V	0.8 V	0.8 V	0.8 V							G	2.5		V			
				2	2.0 V	2.0 V		2.0 V	0.8 V	0.8 V								Ch+4		"		
				3	2.0 V		"	"	2.0 V	2.0 V	2.0 V	0.8 V							P		"	
				4	0.8 V	"	"	"	"	"	"	0.8 V	2.0 V	-1.0 mA					F 0		"	
				5	"	"	"	"	"	"	"	"	"		-1.0 mA			F 1		"		
				6	"	"	"	"	"	"	"	"	"	"		-1.0 mA		F 2		"		
				7	"	"	"	"	"	"	"	"	"	"				F 3		"		
	V _{OL}	3007	883	8	2.0 V	"	"	"	0.8 V	"							G		0.5	"		
				9	"	"	"	"	0.8 V	0.8 V	0.8 V	0.8 V						Ch+4		"		
				10	"	"	"	0.8 V	2.0 V	2.0 V	2.0 V							P		"		
				11	"	0.8 V	2.0 V	"	"	"	"	2.0 V	2.0 V	20 mA				F 0		"		
				12	"	"	"	"	"	"	"	"	"		20 mA			F 1		"		
				13	"	"	"	"	"	"	"	"	"	"		20 mA		F 2		"		
				14	"	"	"	"	"	"	"	"	"	"				F 3		"		
	V _{IC}		883	15	"	"	"	"	"	"	"	"	"	"	"	A = B			"			
				16	-18 mA												B 0	-1.2	"			
		3010	883	17		-18 mA										A 0		"	"			
				18			-18 mA										S3		"	"		
				19				-18 mA									S2		"	"	"	
				20					-18 mA								S1		"	"	"	
				21								-18 mA						S0		"	"	"
				22									-18 mA					Cn		"	"	"
				23										-18 mA				M		"	"	"
				24														B 3		"	"	"
				25														A 3		"	"	"
				26														B 2		"	"	"
				27														A 2		"	"	"
				28														B 1		"	"	"
				29														A 1		"	"	"
				30	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	2.7 V				M		20	μA	"
				31	"	2.7 V	2.7 V	"	"	"	"	"	"	0.0 V				A 0		"	"	"
				32	"	0.0 V	0.0 V	"	"	"	"	"	"	"				A 1		"	"	"
				33	"	"	"	"	"	"	"	"	"	"				A 2		"	"	"
				34	"	"	"	"	"	"	"	"	"	"				A 3		"	"	"
				35	2.7 V	"	"	"	"	"	"	"	"	"				B 0		"	"	"
				36	0.0 V	"	"	"	"	"	"	"	"	"				B 1		"	"	"
				37	"	"	"	"	"	"	"	"	"	"				B 2		"	"	"
				38	"	"	"	"	"	"	"	"	"	"				B 3		"	"	"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit
				16	17	18	19	20	21	23	24	25	26	27	28		Min	Max	
1 $T_c = 25^\circ\text{C}$	V_{OH}	3006	Case 3 J/ Test no.	F 3	A = B	P	Ch+4	G	B 3	A 3	B 2	A 2	B 1	A 1	V _{CC}	G	2.5		V
							-1.0 mA	-1.0 mA	2.0 V	2.0 V	2.0 V	2.0 V	2.0 V	2.0 V	4.5 V	Ch+4			"
										2.0 V	2.0 V		2.0 V			P			"
									0.8 V		0.8 V		0.8 V			F 0			"
																F 1			"
																F 2			"
																F 3			"
	V_{OL}	3007		8				20 mA		0.8 V	2.0 V		2.0 V			G		0.5	"
				9			20 mA			2.0 V	0.8 V		0.8 V			Ch+4			"
				10					2.0 V	2.0 V	2.0 V		2.0 V			P			"
				11						0.8 V		0.8 V		0.8 V		F 0			"
				12												F 1			"
				13												F 2			"
				14	20 mA											F 3			"
				15						2.0 V		2.0 V				A = B			"
				16										2.0 V		B 0		-1.2	"
				17												A 0			"
				18												S 3			"
	V_{IC}			19												S 2			"
				20												S 1			"
				21												S 0			"
				22												Cn			"
				23												M			"
				24					-18 mA							B 3			"
				25						-18 mA						A 3			"
				26							-18 mA					B 2			"
				27								-18 mA				A 2			"
				28									-18 mA			B 1			"
				29										-18 mA		A 1			"
				30					0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	5.5 V	M		20	μA
				31										0.0 V		A 0			"
				32										2.7 V		A 1			"
				33								2.7 V		0.0 V		A 2			"
				34						2.7 V		0.0 V				A 3			"
				35						0.0 V						B 0			"
				36									2.7 V			B 1			"
				37							2.7 V		0.0 V			B 2			"
				38					2.7 V		0.0 V					B 3			"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L Case 3 $\downarrow$ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit
				B 0	A 0	S3	S2	S1	S0	Cn	M	F 0	F 1	F 2	GND		Min	Max	
1 Tc = 25°C	I _{HI}	3010	39	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	2.7 V	0.0 V	0.0 V				GND	S0		20	μ A
		"	40	0.0 V	"	2.7 V	"	0.0 V	0.0 V	"	"				"	S3			"
		"	41	5.5 V	"	0.0 V	"	2.7 V	"	"	"				"	S1			"
		"	42	"	"	0.0 V	2.7 V	0.0 V	"	"	"				"	S2			"
		"	43	"	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	2.7 V	5.5 V				"	Cn			"
		"	44	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	7.0 V				"	M		100	"
		"	45	"	7.0 V	"	"	"	"	"	0.0 V				"	A 0			"
		"	46	"	0.0 V	"	"	"	"	"	"				"	A 1			"
	I _{HE}	"	47	"	"	"	"	"	"	"	"				"	A 2			"
		"	48	"	"	"	"	"	"	"	"				"	A 3			"
		"	49	7.0 V	"	"	"	"	"	"	"				"	B 0			"
		"	50	0.0 V	"	"	"	"	"	"	"				"	B 1			"
		"	51	"	"	"	"	"	"	"	"				"	B 2			"
		"	52	"	"	"	"	"	"	"	"				"	B 3			"
		"	53	"	"	"	"	"	7.0 V	"	"				"	S0			"
		"	54	"	"	7.0 V	"	"	0.0 V	"	"				"	S3			"
		"	55	5.5 V	"	0.0 V	"	7.0 V	"	"	"				"	S1			"
		"	56	"	"	0.0 V	7.0 V	0.0 V	"	"	"				"	S2			"
		"	57	"	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	7.0 V	5.5 V				"	Cn			"
	I _{LI}	3009	58	"	"	"	"	"	"	5.5 V	0.5 V				"	M	2/	2/	mA
	I _{LI2}	"	59	0.5 V	"	"	"	"	"	"	5.5 V				"	B 0			"
		"	60	5.5 V	"	"	"	"	"	"	"				"	B 1			"
		"	61	"	"	"	"	"	"	"	"				"	B 2			"
		"	62	"	"	"	"	"	"	"	"				"	B 3			"
		"	63	"	0.5 V	"	"	"	"	"	"				"	A 0			"
		"	64	"	5.5 V	"	"	"	"	"	"				"	A 1			"
		"	65	"	"	"	"	"	"	"	"				"	A 2			"
		"	66	"	"	"	"	"	"	"	"				"	A 3			"
	I _{LI3}	"	67	"	"	"	"	"	0.5 V	"	"				"	S0			"
		"	68	"	"	0.5 V	"	"	5.5 V	"	"				"	S3			"
		"	69	0.0 V	"	5.5 V	"	0.5 V	"	"	"				"	S1			"
		"	70	"	"	0.0 V	0.5 V	0.0 V	0.0 V	0.0 V	0.0 V				"	S2			"
I _{LI4} I _{LOS}	I _{LOS}	"	71	"	0.0 V	0.0 V	0.0 V	0.0 V	"	0.5 V	0.0 V				"	Cn			"
		3011	72	"	"	5.5 V	"	"	"	"	"				"	G	-60	-150	"
		"	73	"	"	0.0 V	"	"	"	0.0 V	"				"	Cn+4			"
		"	74	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	"				"	P			"
		"	75	"	"	"	"	"	"	"	"	0.0 V			"	F 0			"
		"	76	"	"	"	"	"	"	"	"	"	0.0 V		"	F 1			"
		"	77	"	"	"	"	"	"	"	"	"		0.0 V	"	F 2			"
		"	78	"	"	"	"	"	"	"	"	"			"	F 3			"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit
				16	17	18	19	20	21	23	24	25	26	27	28		Min	Max	
1 Tc = 25°C	I _{HI1}	3010	Case 3 J/	F 3	A = B	P	Cn+4	G	B 3	A 3	B 2	A 2	B 1	A 1	V _{CC}	S0		20	μA
									0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	5.5 V	S3			
									5.5 V		5.5 V		5.5 V			S1			
																S2			
										5.5 V		5.5 V		5.5 V		Cn			
									0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V		M		100	
														7.0 V		A 0			
														0.0 V		A 1			
	I _{HI2}											7.0 V		0.0 V		A 2			
												0.0 V				A 3			
										7.0 V						B 0			
													7.0 V			B 1			
											7.0 V		0.0 V			B 2			
									7.0 V		0.0 V					B 3			
									0.0 V							S0			
									0.0 V							S3			
	I _{HI3}								5.5 V		5.5 V		5.5 V			S1			
																S2			
										5.5 V		5.5 V		5.5 V		Cn			
																M	2/	2/	mA
																B 0			
													0.5 V			B 1			
											0.5 V		5.5 V			B 2			
									0.5 V		5.5 V					B 3			
	I _{HI4}								5.5 V							A 0			
														0.5 V		A 1			
												0.5 V		5.5 V		A 2			
										0.5 V		5.5 V				A 3			
										5.5 V						S0			
											0.0 V					S3			
									0.0 V				0.0 V			S1			
										0.0 V						S2			
2	I _{LOS}	3011						0.0 V	5.5 V	5.5 V				0.0 V		Cn			
							0.0 V		0.0 V	0.0 V						G	-60	-150	
						0.0 V			0.0 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V		Cn+4			
									5.5 V							P			
																F 0			
																F 1			
																F 2			
				0.0 V												F 3			

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Measured terminal	Limits	Unit																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
1 Tc = 25°C	I _{oo}		3 1/	B 0 4.5 V	A 0 4.5 V	S3 4.5 V	S2 4.5 V	S1 GND	S0 4.5 V	Cn GND	M 4.5 V	F 0 2.5 V	F 1 2.5 V	F 2 2.5 V	GND	F 2 GND	GND	G	Min 60	Max 65																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
																					79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128																																																																																																																																																																																																																																																																																																																																																																																																																																							
																																																																							Test no.	4.5 V	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.5 V	GND	4.

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits	Unit		
1	I _{oo} T _C = 25°C		Case J, K, L	16	17	18	19	20	21	23	24	25	26	27	28		Min	Max		
			Case 3 J/																	
			Test no.	F 3	A = B	P	Ch+4	G	B 3	A 3	B 2	A 2	B 1	A 1	V _{CC}	G	60			mA
			79					2.5 V	GND	GND	4.5 V	4.5 V	4.5 V	4.5 V	4.5 V	Ch+4	"			"
			80				2.5 V		"	4.5 V	GND	"	GND	"	"	"	"			"
			81			2.5 V			4.5 V	"	"	"	4.5 V	"	"	"	"			"
			82						"	GND	"	GND	"	"	"	"	"			"
			83						"	"	"	"	"	"	"	"	"			"
			84						"	"	"	"	"	"	"	"	"			"
			85	2.5 V					"	"	"	"	"	"	"	"	"			"
2	I _{cc1} I _{cc4}	3005 3005							0.0 V	0.0 V	0.0 V	4.5 V	"	"	"	A = B	"	"		
								0.0 V	5.5 V	0.0 V	5.5 V	0.0 V	5.5 V	0.0 V	5.5 V	V _{CC}	65	"		
																			"	
																			"	
3	Same tests, terminal conditions, and limits as for subgroup 1, except T _C = +125°C and V _{IC} tests are omitted.																			
7	Functional 3/	3014	89	L	L	L	H	L	A	B	B	B	B	B	B	4/	All outputs			
			90	"	"	"	"	"	"	"	"	"	"	"	"	"	"		"	
			91	"	"	"	"	"	"	"	"	"	"	"	"	"	"		"	
			92	"	"	"	"	"	"	"	"	"	"	"	"	"	"		"	
			93	H	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			94	H	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			95	L	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			96	L	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			97	H	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			98	H	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			99	L	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			100	L	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			101	H	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			102	H	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			103	L	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			104	L	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			105	H	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			106	L	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			107	H	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			108	L	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			109	H	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			110	L	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			111	H	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			112	H	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			113	L	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			114	H	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			115	H	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			116	L	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			117	H	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			118	L	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			119	H	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			120	"	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			121	"	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			122	"	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			123	"	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			124	"	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			125	"	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			126	"	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			127	"	"	"	"	"	"	"	"	"	"	"	"	"	"		"	"
			8	Repeat subgroups 7 at T _C = +125°C and T _C = -55°C.																

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	Timing conditions (V _{DD} = 5.0 V, V _{SS} = 0 V, T _C = 25°C)																								Measured terminal	Limits		Unit	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	Min	Max													
9 T _C = 25°C	t _{PHL1}	3003 Fig. 4	Case 3 J																													
			Test no.																													
			129	B 0	A 0	S3	S1	S0	Cn	M	F 0	OUT	F 1	OUT																		
			130	"	0.0 V	IN	2.7 V	0.0 V	"	"	2.7 V	0.0 V	0.0 V	OUT	OUT																	
			131	"	"	"	"	"	"	"	"	"	"																			
			132	"	"	"	"	"	"	"	"	"	"																			
			133	"	"	"	"	"	"	"	"	"	"																			
			134	IN	"	"	"	"	"	"	"	"	"																			
			135	0.0 V	"	"	"	"	"	"	"	"	"																			
			136	"	"	"	"	"	"	"	"	"	"																			
			137	"	"	IN	"	"	"	"	"	"	"																			
			138	"	0.0 V	"	"	"	"	"	"	"	"																			
			139	"	"	"	"	"	"	"	"	"	"																			
			140	"	"	"	"	"	"	"	"	"	"																			
			141	IN	"	"	"	"	"	"	"	"	"																			
			142	0.0 V	"	"	"	"	"	"	"	"	"																			
143	"	"	"	"	"	"	"	"	"	"																						
144	"	"	"	"	"	"	"	"	"	"																						
	t _{PHL2}		145	IN	2.7 V	"	"	"	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			146	0.0 V	IN	"	"	"	"	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			147	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			148	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			149	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			150	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			151	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			152	IN	"	"	"	"	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			153	0.0 V	IN	"	"	"	"	"	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
			154	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
155	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"				
156	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"				
157	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"				
158	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"				

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L 3 $\downarrow$ Test no.	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit
				16	17	18	19	20	21	23	24	25	26	27	28		Min	Max	
9 Tc = 25°C	t_{PH1}	3003 Fig. 4	Test no.	$\bar{F} 3$	A = B	$\bar{P}$	Cn+4	$\bar{G}$	$\bar{B} 3$	$\bar{A} 3$	$\bar{B} 2$	$\bar{A} 2$	$\bar{B} 1$	$\bar{A} 1$	V_{CC}	$\bar{A} 0$ to $\bar{F} 0$	3.0	10.0	ns
				129					0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	"	$\bar{A} 1$ to $\bar{F} 1$	"	"	"
				130					"	"	"	0.0 V	"	0.0 V	"	$\bar{A} 2$ to $\bar{F} 2$	"	"	"
				131					"	IN	"	0.0 V	"	"	"	$\bar{A} 3$ to $\bar{F} 3$	"	"	"
				132	OUT				"	0.0 V	"	"	"	"	"	$\bar{B} 0$ to $\bar{F} 0$	"	"	"
				133					"	"	"	"	"	"	"	$\bar{B} 1$ to $\bar{F} 1$	"	"	"
				134					"	"	IN	"	0.0 V	"	"	$\bar{B} 2$ to $\bar{F} 2$	"	"	"
				135					IN	"	0.0 V	"	"	"	"	$\bar{B} 3$ to $\bar{F} 3$	"	"	"
				136	OUT				0.0 V	"	"	"	"	"	"	$\bar{A} 0$ to $\bar{F} 0$	"	9.0	"
				137					0.0 V	"	"	"	"	IN	"	$\bar{A} 1$ to $\bar{F} 1$	"	"	"
				138					"	"	"	IN	"	0.0 V	"	$\bar{A} 2$ to $\bar{F} 2$	"	"	"
				139					"	IN	"	0.0 V	"	"	"	$\bar{A} 3$ to $\bar{F} 3$	"	"	"
	t_{PH2}	"	Test no.	140	OUT				"	0.0 V	"	"	"	"	"	$\bar{B} 0$ to $\bar{F} 0$	"	"	"
				141					"	"	"	"	"	"	"	$\bar{B} 1$ to $\bar{F} 1$	"	"	"
				142					"	"	IN	"	0.0 V	"	"	$\bar{B} 2$ to $\bar{F} 2$	"	"	"
				143					"	"	0.0 V	"	"	"	"	$\bar{B} 3$ to $\bar{F} 3$	"	"	"
				144	OUT				IN	"	0.0 V	"	"	"	"	$\bar{B} 0$ to $\bar{F} 0$	4.0	10.0	"
				145	OUT				0.0 V	"	"	0.0 V	"	0.0 V	"	$\bar{A} 0$ to $\bar{F} 1$	"	"	"
				146					"	0.0 V	"	0.0 V	"	2.7 V	"	$\bar{A} 0$ to $\bar{F} 2$	"	"	"
				147					"	"	"	0.0 V	"	2.7 V	"	$\bar{A} 0$ to $\bar{F} 3$	"	"	"
				148	OUT				"	"	"	2.7 V	"	"	"	$\bar{A} 1$ to $\bar{F} 2$	"	"	"
				149	OUT				"	"	"	IN	"	"	"	$\bar{A} 1$ to $\bar{F} 3$	"	"	"
				150					"	"	"	0.0 V	"	IN	"	$\bar{A} 2$ to $\bar{F} 3$	"	"	"
				151	OUT				"	"	"	2.7 V	"	IN	"	$\bar{A} 3$ to $\bar{F} 3$	"	"	"
	t_{PH2}	"	Test no.	152	OUT				"	2.7 V	"	2.7 V	"	2.7 V	"	$\bar{B} 0$ to $\bar{F} 3$	"	10.5	"
				153					"	0.0 V	"	0.0 V	"	0.0 V	"	$\bar{B} 1$ to $\bar{F} 1$	"	"	"
				154					"	"	"	0.0 V	"	2.7 V	"	$\bar{B} 2$ to $\bar{F} 2$	"	"	"
				155	OUT				"	"	"	2.7 V	"	"	"	$\bar{B} 3$ to $\bar{F} 3$	"	"	"
				156	OUT				"	"	"	IN	"	"	"	$\bar{A} 0$ to $\bar{F} 3$	"	"	"
				157					"	"	"	0.0 V	"	IN	"	$\bar{A} 1$ to $\bar{F} 2$	"	"	"
				158	OUT				"	"	"	2.7 V	"	IN	"	$\bar{A} 1$ to $\bar{F} 3$	"	"	"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits			Unit
				Case 3 J	Test no.	B 0	A 0	S3	S2	S1	S0	Cn	M	F 0	F 1		F 2	GND	Min	
9 Tc = 25°C	tPHL3	3003 Fig. 4	159	0.0 V	IN	0.0 V	0.0 V	2.7 V	2.7 V	0.0 V	0.0 V					A 0 to Cn + 4	3.5	12.0	ns	
			160	2.7 V	0.0 V												A 1 to Cn + 4			"
			161	"	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to Cn + 4	"	"	"
			162	"	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to Cn + 4	"	"	"
			163	IN	"	"	"	"	"	"	"	"	"	"	"	"	B 0 to Cn + 4	"	"	"
			164	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	B 1 to Cn + 4	"	"	"
			165	"	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to Cn + 4	"	"	"
			166	"	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to Cn + 4	"	"	"
			167	0.0 V	IN	"	"	"	"	"	"	"	"	"	"	"	A 0 to Cn + 4	5.0	13.0	"
			168	2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	"	"	A 1 to Cn + 4	"	"	"
	tPHL4		169	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to Cn + 4	"	"	"	
			170	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to Cn + 4	"	"	"	
			171	IN	"	"	"	"	"	"	"	"	"	"	"	B 0 to Cn + 4	"	"	"	
			172	2.7 V	"	"	"	"	"	"	"	"	"	"	"	B 1 to Cn + 4	"	"	"	
			173	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to Cn + 4	"	"	"	
			174	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to Cn + 4	"	"	"	
			175	"	IN	"	"	"	"	"	"	"	"	"	"	A 0 to P	3.0	7.5	"	
			176	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	A 1 to P	"	"	"	
			177	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to P	"	"	"	
			178	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to P	"	"	"	
	tPH4		179	IN	2.7 V	"	"	"	"	"	"	"	"	"	B 0 to P	"	"	"		
			180	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	B 1 to P	"	"	"	
			181	"	"	"	"	"	"	"	"	"	"	"	"	B 2 to P	"	"	"	
			182	"	"	"	"	"	"	"	"	"	"	"	"	B 3 to P	"	"	"	
			183	2.7 V	IN	"	"	"	"	"	"	"	"	"	"	A 0 to P	2.5	"	"	
			184	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	A 1 to P	"	"	"	
			185	"	"	"	"	"	"	"	"	"	"	"	"	A 2 to P	"	"	"	
			186	"	"	"	"	"	"	"	"	"	"	"	"	A 3 to P	"	"	"	
			187	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	B 0 to P	"	"	"	
			188	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	"	B 1 to P	"	"	"	
			189	"	"	"	"	"	"	"	"	"	"	B 2 to P	"	"	"	"		
			190	"	"	"	"	"	"	"	"	"	"	"	B 3 to P	"	"	"		

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit
				16	17	18	19	20	21	23	24	25	26	27	28		Min	Max	
9 Tc = 25°C	t _{PHL3}	3003 Fig. 4	Test no.	F 3	A = B	P	Cn+4	G	B 3	A 3	B 2	A 2	B 1	A 1	V _{cc}	A 0 to Cn + 4	3.5	12.0	ns
			159				OUT		2.7 V	0.0 V	2.7 V	0.0 V	2.7 V	0.0 V	5.0 V	A 0 to Cn + 4			
			160								2.7 V	0.0 V	0.0 V	IN	"	A 1 to Cn + 4	"	"	"
			161								0.0 V	IN	2.7 V	0.0 V	"	A 2 to Cn + 4	"	"	"
			162						0.0 V	IN	2.7 V	0.0 V	"	"	"	A 3 to Cn + 4	"	"	"
			163						2.7 V	0.0 V	"	"	"	"	"	B 0 to Cn + 4	"	"	"
			164								"	"	IN	"	"	B 1 to Cn + 4	"	"	"
			165								IN	"	2.7 V	"	"	B 2 to Cn + 4	"	"	"
			166						IN	"	2.7 V	"	"	"	"	B 3 to Cn + 4	"	"	"
			167						2.7 V	"	"	"	"	"	"	A 0 to Cn + 4	5.0	13.0	"
	t _{PHL4}		168							"	"	"	0.0 V	IN	"	A 1 to Cn + 4	"	"	"
			169							"	0.0 V	IN	2.7 V	0.0 V	"	A 2 to Cn + 4	"	"	"
			170						0.0 V	IN	2.7 V	0.0 V	"	"	"	A 3 to Cn + 4	"	"	"
			171						2.7 V	0.0 V	"	"	"	"	"	B 0 to Cn + 4	"	"	"
			172							"	"	"	IN	"	"	B 1 to Cn + 4	"	"	"
			173							"	IN	"	2.7 V	"	"	B 2 to Cn + 4	"	"	"
			174						IN	"	2.7 V	"	2.7 V	"	"	B 3 to Cn + 4	"	"	"
			175			OUT			0.0 V	"	0.0 V	"	0.0 V	"	"	A 0 to P	3.0	7.5	"
			176							"	0.0 V	"	2.7 V	IN	"	A 1 to P	"	"	"
			177							"	2.7 V	IN	0.0 V	0.0 V	"	A 2 to P	"	"	"
	t _{PHL4}		178						2.7 V	IN	0.0 V	0.0 V	"	"	"	A 3 to P	"	"	"
			179						0.0 V	0.0 V	"	"	"	"	"	B 0 to P	"	"	"
			180							"	"	"	IN	2.7 V	"	B 1 to P	"	"	"
			181							"	IN	2.7 V	0.0 V	0.0 V	"	B 2 to P	"	"	"
			182						IN	2.7 V	0.0 V	0.0 V	"	"	"	B 3 to P	"	"	"
			183						0.0 V	0.0 V	"	"	2.7 V	IN	"	A 0 to P	2.5	"	"
			184							"	"	"	"	"	"	A 1 to P	"	"	"
			185							"	2.7 V	IN	0.0 V	0.0 V	"	A 2 to P	"	"	"
			186						2.7 V	IN	0.0 V	0.0 V	"	"	"	A 3 to P	"	"	"
			187						0.0 V	0.0 V	"	"	"	"	"	B 0 to P	"	"	"
			188							"	"	"	IN	2.7 V	"	B 1 to P	"	"	"
			189							"	IN	2.7 V	0.0 V	0.0 V	"	B 2 to P	"	"	"
			190						IN	2.7 V	0.0 V	0.0 V	"	"	"	B 3 to P	"	"	"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L, Case 3 $\downarrow$ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit
				1	2	3	4	5	6	7	8	9	10	11	12		Min	Max	
9 Tc = 25°C	t _{PHL5} t _{PH5} t _{PHL6}	3003 Fig. 4	191 192 193 194 195 196 197 198 199 200	B 0	A 0	S3	S2	S1	S0	Cn	M	F 0	F 1	F 2	GND	Cn to F 0	3.0	8.5	ns
				"	2.7 V	"	"	"	"	IN	"	OUT	"	"	"	Cn to F 0	3.0	8.5	"
				"	IN	"	"	"	"	0.0 V	"	"	"	"	"	A 0 to G	2.5	7.5	"
				2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	"	A 1 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 2 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 3 to G	"	"	"
				IN	"	"	"	"	"	"	"	"	"	"	"	B 0 to G	"	"	"
				2.7 V	"	"	"	"	"	"	"	"	"	"	"	B 1 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 2 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 3 to G	"	"	"
	t _{PHL6} t _{PHL7} t _{PH7} t _{PHL8}		201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226	0.0 V	IN	"	"	"	"	"	"	"	"	"	"	A 0 to G	"	"	"
				2.7 V	0.0 V	"	"	"	"	"	"	"	"	"	"	A 1 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 2 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 3 to G	"	"	"
				IN	"	"	"	"	"	"	"	"	"	"	"	B 0 to G	"	"	"
				2.7 V	"	"	"	"	"	"	"	"	"	"	"	B 1 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 2 to G	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 3 to G	"	"	"
				0.0 V	2.7 V	"	"	"	"	IN	"	"	"	"	"	Cn to Cn + 4	3.0	8.0	"
				"	2.7 V	"	"	"	"	IN	"	"	"	"	"	Cn to Cn + 4	"	8.5	"
				"	IN	0.0 V	2.7 V	2.7 V	0.0 V	0.0 V	"	OUT	"	"	"	A 0 to F 0	"	11.0	"
	t _{PHL8}		212 213 214 215 216 217 218 219 220 221 222 223 224 225 226	"	2.7 V	"	"	"	"	"	"	"	OUT	"	"	A 1 to F 1	"	"	"
				"	"	"	"	"	"	"	"	"	"	OUT	"	A 2 to F 1	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	A 3 to F 1	"	"	"
				IN	"	"	"	"	"	"	"	OUT	"	"	"	B 0 to F 0	"	"	"
				0.0 V	"	"	"	"	"	"	"	"	OUT	"	"	B 1 to F 1	"	"	"
				"	"	"	"	"	"	"	"	"	"	OUT	"	B 2 to F 1	"	"	"
				"	"	"	"	"	"	"	"	"	"	"	"	B 3 to F 1	"	"	"
				"	IN	"	"	"	"	"	"	OUT	"	"	"	A 0 to F 0	"	12.0	"
				"	2.7 V	"	"	"	"	"	"	"	OUT	"	"	A 1 to F 1	"	"	"
				"	"	"	"	"	"	"	"	"	"	OUT	"	A 2 to F 1	"	"	"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit
				16	17	18	19	20	21	23	24	25	26	27	28		Min	Max	
9	t_{PHL5} t_{PHL6}	3003 Fig. 4	Case 3 J/ Test no.	$\bar{F} 3$	A = B	$\bar{P}$	Cn+4	$\bar{G}$	$\bar{B} 3$	$\bar{A} 3$	$\bar{B} 2$	$\bar{A} 2$	$\bar{B} 1$	$\bar{A} 1$	V_{CC}	Cn to $\bar{F} 0$	3.0	8.5	ns
									0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	5.0V	Cn to $\bar{F} 0$	3.0	8.5	"
								OUT	2.7V	0.0V	2.7V	0.0V	2.7V	0.0V	"	A 0 to $\bar{G}$	2.5	7.5	"
								"	"	"	2.7V	0.0V	0.0V	IN	"	$\bar{A} 1$ to $\bar{G}$	"	"	"
								"	"	"	0.0V	IN	2.7V	0.0V	"	$\bar{A} 2$ to $\bar{G}$	"	"	"
								"	0.0V	IN	2.7V	0.0V	"	"	"	$\bar{A} 3$ to $\bar{G}$	"	"	"
								"	2.7V	0.0V	"	"	"	"	"	$\bar{B} 0$ to $\bar{G}$	"	"	"
								"	"	"	"	"	IN	"	"	$\bar{B} 1$ to $\bar{G}$	"	"	"
								"	"	"	IN	"	2.7V	"	"	$\bar{B} 2$ to $\bar{G}$	"	"	"
								"	IN	"	2.7V	"	"	"	"	$\bar{B} 3$ to $\bar{G}$	"	"	"
								"	2.7V	"	"	"	"	"	"	$\bar{A} 0$ to $\bar{G}$	"	"	"
								"	"	"	"	"	0.0V	IN	"	$\bar{A} 1$ to $\bar{G}$	"	"	"
								"	"	"	0.0V	IN	2.7V	0.0V	"	$\bar{A} 2$ to $\bar{G}$	"	"	"
								"	0.0V	IN	2.7V	0.0V	"	"	"	$\bar{A} 3$ to $\bar{G}$	"	"	"
								"	2.7V	0.0V	"	"	"	"	"	$\bar{B} 0$ to $\bar{G}$	"	"	"
								"	"	"	"	"	IN	"	"	$\bar{B} 1$ to $\bar{G}$	"	"	"
								"	"	"	IN	"	2.7V	"	"	$\bar{B} 2$ to $\bar{G}$	"	"	"
								"	IN	"	2.7V	"	2.7V	"	"	$\bar{B} 3$ to $\bar{G}$	"	"	"
							OUT		0.0V	2.7V	0.0V	2.7V	0.0V	2.7V	"	Cn to Cn+4	3.0	8.0	"
							OUT		"	"	"	"	"	"	"	Cn to Cn+4	"	8.5	"
									"	"	"	"	"	"	"	A 0 to $\bar{F} 0$	"	11.0	"
									"	"	"	"	"	IN	"	A 1 to $\bar{F} 1$	"	"	"
									"	"	"	IN	"	2.7V	"	A 2 to $\bar{F} 2$	"	"	"
									"	IN	"	2.7V	"	"	"	A 3 to $\bar{F} 3$	"	"	"
									"	2.7V	"	"	"	"	"	B 0 to $\bar{F} 0$	"	"	"
									"	"	"	"	IN	"	"	B 1 to $\bar{F} 1$	"	"	"
									"	"	IN	"	0.0V	"	"	B 2 to $\bar{F} 2$	"	"	"
									IN	"	0.0V	"	"	"	"	B 3 to $\bar{F} 3$	"	"	"
									0.0V	"	"	"	"	"	"	A 0 to $\bar{F} 0$	"	12.0	"
									"	"	"	"	"	IN	"	A 1 to $\bar{F} 1$	"	"	"
									"	"	"	IN	"	2.7V	"	A 2 to $\bar{F} 2$	"	"	"
									"	IN	"	2.7V	"	"	"	A 3 to $\bar{F} 3$	"	"	"
									"	2.7V	"	"	"	"	"	B 0 to $\bar{F} 0$	"	"	"
									"	"	"	"	0.0V	"	"	B 1 to $\bar{F} 1$	"	"	"
									"	2.7V	"	"	"	"	"	B 2 to $\bar{F} 2$	"	"	"
									"	"	"	"	IN	"	"	B 3 to $\bar{F} 3$	"	"	"
									"	"	IN	"	0.0V	"	"	A 0 to $\bar{F} 0$	"	"	"
									IN	"	0.0V	"	0.0V	"	"	B 1 to $\bar{F} 1$	"	"	"
									"	"	"	"	0.0V	"	"	B 2 to $\bar{F} 2$	"	"	"
									"	"	"	"	0.0V	"	"	B 3 to $\bar{F} 3$	"	"	"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit
				Case 3 J	Test no.	B 0	A 0	S3	S2	S1	S0	Cn	M	F 0	F 1	F 2	Min	Max	
9 Tc = 25°C	t_{PHL9}	3003 Fig. 4	Case 3 J	227	227	0.0 V	IN	0.0 V	2.7 V	2.7 V	0.0 V	0.0 V	2.7 V	OUT	OUT	OUT	3.0	10.0	ns
				228	228	"	0.0 V	"	"	"	"	"	"	"	OUT	"	"	"	"
				229	229	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"
				230	230	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				231	231	IN	"	"	"	"	"	"	"	OUT	"	"	"	"	"
				232	232	0.0 V	"	"	"	"	"	"	"	"	OUT	"	"	"	"
				233	233	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"
				234	234	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				235	235	"	IN	"	"	"	"	"	"	OUT	"	"	3.5	9.5	"
				236	236	"	0.0 V	"	"	"	"	"	"	"	OUT	"	"	"	"
				237	237	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"
				238	238	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				239	239	IN	"	"	"	"	"	"	"	OUT	"	"	"	"	"
	t_{PHL10}			240	240	0.0 V	"	"	"	"	"	"	"	"	OUT	"	"	"	"
				241	241	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"
				242	242	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				243	243	IN	2.7 V	"	"	"	"	2.7 V	0.0 V	"	"	"	3.0	12.0	"
				244	244	2.7 V	IN	"	"	"	"	0.0 V	"	"	OUT	"	"	"	"
				245	245	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"
				246	246	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				247	247	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"
				248	248	0.0 V	"	"	"	"	"	"	"	"	"	OUT	"	"	"
				249	249	0.0 V	"	"	"	"	"	2.7 V	"	"	"	"	"	"	"
				250	250	IN	"	"	"	"	"	2.7 V	"	"	"	"	4.0	"	"
				251	251	2.7 V	IN	"	"	"	"	0.0 V	"	"	OUT	"	"	"	"
	t_{PHL10}			252	252	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"
				253	253	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				254	254	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"
				255	255	0.0 V	"	"	"	"	"	"	"	"	"	OUT	"	"	"
				256	256	0.0 V	"	"	"	"	"	2.7 V	"	"	"	"	"	"	"
																			"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit	
				16	17	18	19	20	21	22	23	24	Min	Max						
9 Tc = 25°C	t _{PHL9}	3003 Fig. 4	Test no.	F 3	A = B	P	Cn+4	G	B 3	A 3	B 2	A 2	B 1	A 1	V _{CC}	A 0 to F 0	3.0	10.0	ns	
									0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	5.0 V	A 1 to F 1	"	"	"	
									"	"	"	"	0.0 V	"	"	"	A 2 to F 2	"	"	"
									"	IN	0.0 V	0.0 V	"	"	"	"	A 3 to F 3	"	"	"
									"	0.0 V	"	"	"	"	"	"	B 0 to F 0	"	"	"
									"	"	"	"	IN	"	"	"	B 1 to F 1	"	"	"
									"	"	"	"	0.0 V	"	"	"	B 2 to F 2	"	"	"
									IN	"	0.0 V	"	"	"	"	"	B 3 to F 3	"	"	"
									0.0 V	"	"	"	"	"	"	"	A 0 to F 0	3.5	9.5	"
									"	"	"	"	"	IN	"	0.0 V	A 1 to F 1	"	"	"
									"	"	"	IN	"	0.0 V	"	"	A 2 to F 2	"	"	"
									"	IN	"	0.0 V	"	"	"	"	A 3 to F 3	"	"	"
									"	0.0 V	"	"	"	"	"	"	B 0 to F 0	"	"	"
									"	"	"	"	IN	"	"	"	B 1 to F 1	"	"	"
									"	"	"	"	0.0 V	"	"	"	B 2 to F 2	"	"	"
									IN	"	0.0 V	"	"	"	"	"	B 3 to F 3	"	"	"
10	t _{PHL10}	"		OUT					IN	2.7 V	"	"	"	"	"	B 0 to F 3	3.0	12.0	"	
									0.0 V	"	"	2.7 V	"	"	"	A 0 to F 1	"	"	"	
									"	"	"	"	2.7 V	"	"	A 0 to F 2	"	"	"	
									2.7 V	"	"	2.7 V	"	"	"	A 0 to F 3	"	"	"	
									2.7 V	"	"	"	"	"	"	A 2 to F 3	"	"	"	
									0.0 V	"	"	0.0 V	"	IN	"	A 1 to F 2	"	"	"	
									"	"	"	"	"	"	"	A 1 to F 3	"	"	"	
									"	2.7 V	"	"	0.0 V	0.0 V	"	B 0 to F 3	4.0	"	"	
									"	0.0 V	"	"	2.7 V	0.0 V	"	A 0 to F 1	"	"	"	
									"	"	"	"	2.7 V	2.7 V	"	A 0 to F 2	"	"	"	
									2.7 V	"	"	2.7 V	"	"	"	A 0 to F 3	"	"	"	
									2.7 V	"	"	IN	"	"	"	A 2 to F 3	"	"	"	
									0.0 V	"	"	0.0 V	"	IN	"	A 1 to F 2	"	"	"	
									"	"	"	"	"	"	"	A 1 to F 3	"	"	"	
									"	2.7 V	"	"	0.0 V	0.0 V	"	B 0 to F 3	4.0	"	"	
									"	0.0 V	"	"	2.7 V	0.0 V	"	A 0 to F 1	"	"	"	
11	t _{PHL11}	"							"	"	2.7 V	"	"	"	"	A 0 to F 2	"	"	"	
									"	"	"	"	"	"	"	A 0 to F 3	"	"	"	
									2.7 V	"	"	2.7 V	"	"	"	A 2 to F 3	"	"	"	
									0.0 V	"	"	0.0 V	"	IN	"	A 1 to F 2	"	"	"	
									"	"	"	"	"	"	"	A 1 to F 3	"	"	"	
									"	2.7 V	"	"	0.0 V	0.0 V	"	B 0 to F 3	4.0	"	"	
									"	0.0 V	"	"	2.7 V	0.0 V	"	A 0 to F 1	"	"	"	
									"	"	"	"	2.7 V	2.7 V	"	A 0 to F 2	"	"	"	
									2.7 V	"	"	2.7 V	"	"	"	A 0 to F 3	"	"	"	
									2.7 V	"	"	IN	"	"	"	A 2 to F 3	"	"	"	
									0.0 V	"	"	0.0 V	"	IN	"	A 1 to F 2	"	"	"	
									"	"	"	"	"	"	"	A 1 to F 3	"	"	"	
									"	2.7 V	"	"	0.0 V	0.0 V	"	B 0 to F 3	4.0	"	"	
									"	0.0 V	"	"	2.7 V	0.0 V	"	A 0 to F 1	"	"	"	
									"	"	"	"	2.7 V	2.7 V	"	A 0 to F 2	"	"	"	
									2.7 V	"	"	2.7 V	"	"	"	A 0 to F 3	"	"	"	
					2.7 V	"	"	IN	"	"	"	A 2 to F 3	"	"	"					
					0.0 V	"	"	0.0 V	"	IN	"	A 1 to F 2	"	"	"					
					"	"	"	"	"	"	"	A 1 to F 3	"	"	"					

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L Case 3 $\downarrow$ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits		Unit
				B 0	A 0	S3	S2	S1	S0	Cn	M	F 0	F 1	F 2	GND		Min	Max	
9 Tc = 25°C	t _{PHL1}	3003 Fig. 4	257	2.7 V	IN	0.0 V	2.7 V	2.7 V	0.0 V	0.0 V	0.0 V					A 0 to G	2.5	10.0	ns
			258	0.0 V	0.0 V	"	"	"	"	"	"					A 1 to G	"	"	"
			259	"	"	"	"	"	"	"	"					A 2 to G	"	"	"
			260	"	"	"	"	"	"	"	"					A 3 to G	"	"	"
			261	IN	"	"	"	"	"	"	"					B 0 to G	"	"	"
			262	0.0 V	"	"	"	"	"	"	"					B 1 to G	"	"	"
			263	"	"	"	"	"	"	"	"					B 2 to G	"	"	"
			264	"	"	"	"	"	"	"	"					B 3 to G	"	"	"
	t _{PHI1}		265	2.7 V	IN	"	"	"	"	"	"					A 0 to G	3.0	9.0	"
			266	0.0 V	0.0 V	"	"	"	"	"	"					A 1 to G	"	"	"
			267	"	"	"	"	"	"	"	"					A 2 to G	"	"	"
			268	"	"	"	"	"	"	"	"					A 3 to G	"	"	"
			269	IN	"	"	"	"	"	"	"					B 0 to G	"	"	"
			270	0.0 V	"	"	"	"	"	"	"					B 1 to G	"	"	"
			271	"	"	"	"	"	"	"	"					B 2 to G	"	"	"
			272	"	"	"	"	"	"	"	"					B 3 to G	"	"	"
	t _{PHL2}		273	2.7 V	IN	"	"	"	"	"	"					A 0 to Cn + 4	5.0	13.0	"
			274	0.0 V	0.0 V	"	"	"	"	"	"					A 1 to Cn + 4	"	"	"
			275	"	"	"	"	"	"	"	"					A 2 to Cn + 4	"	"	"
			276	"	"	"	"	"	"	"	"					A 3 to Cn + 4	"	"	"
			277	IN	"	"	"	"	"	"	"					B 0 to Cn + 4	"	"	"
			278	0.0 V	"	"	"	"	"	"	"					B 1 to Cn + 4	"	"	"
			279	"	"	"	"	"	"	"	"					B 2 to Cn + 4	"	"	"
			280	"	"	"	"	"	"	"	"					B 3 to Cn + 4	"	"	"
	t _{PHI2}		281	2.7 V	IN	"	"	"	"	"	"					A 0 to Cn + 4	"	14.0	"
			282	0.0 V	0.0 V	"	"	"	"	"	"					A 1 to Cn + 4	"	"	"
			283	"	"	"	"	"	"	"	"					A 2 to Cn + 4	"	"	"
			284	"	"	"	"	"	"	"	"					A 3 to Cn + 4	"	"	"
			285	IN	"	"	"	"	"	"	"					B 0 to Cn + 4	"	"	"
			286	0.0 V	"	"	"	"	"	"	"					B 1 to Cn + 4	"	"	"
			287	"	"	"	"	"	"	"	"					B 2 to Cn + 4	"	"	"
			288	"	"	"	"	"	"	"	"					B 3 to Cn + 4	"	"	"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit	
				16	17	18	19	20	21	23	24	Min	Max							
9 Tc = 25°C	t _{PHL1}	3003 Fig. 4	Test no.	F 3	A = B	P	Cn+4	G	B 3	A 3	B 2	A 2	B 1	A 1	V _{CC}	A 0 to G	2.5	10.0	ns	
			257				OUT	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	5.0 V	A 1 to G	"	"	
			258				"	"	"	"	"	2.7 V	IN	0.0 V	0.0 V	"	A 2 to G	"	"	
			259				"	"	"	"	"	2.7 V	IN	0.0 V	0.0 V	"	A 3 to G	"	"	
			260				"	"	"	"	2.7 V	IN	0.0 V	0.0 V	"	"	B 0 to G	"	"	
			261				"	"	"	"	0.0 V	0.0 V	"	"	IN	"	B 1 to G	"	"	
			262				"	"	"	"	"	"	0.0 V	0.0 V	0.0 V	"	B 2 to G	"	"	
			263				"	"	"	"	"	"	0.0 V	0.0 V	0.0 V	"	B 3 to G	"	"	
			264				"	"	"	"	IN	"	0.0 V	"	"	"	A 0 to G	3.0	9.0	"
			265				"	"	"	"	0.0 V	"	"	"	"	"	A 1 to G	"	"	"
	t _{PHL11}		266					"	"	"	"	"	2.7 V	IN	"	A 2 to G	"	"	"	
			267					"	"	"	"	2.7 V	IN	0.0 V	0.0 V	"	A 3 to G	"	"	
			268					"	"	"	2.7 V	IN	0.0 V	"	"	"	B 0 to G	"	"	
			269					"	"	"	0.0 V	0.0 V	"	"	"	"	B 1 to G	"	"	
			270					"	"	"	"	"	IN	"	"	"	B 2 to G	"	"	
			271					"	"	"	"	"	0.0 V	"	"	"	B 3 to G	"	"	
			272					"	"	"	IN	"	"	"	"	"	A 0 to Cn + 4	5.0	13.0	"
			273				OUT		0.0 V	"	"	"	"	"	"	"	A 1 to Cn + 4	"	"	"
			274				"		"	"	"	"	2.7 V	IN	0.0 V	0.0 V	A 2 to Cn + 4	"	"	"
			275				"		"	"	"	2.7 V	IN	0.0 V	0.0 V	"	A 3 to Cn + 4	"	"	"
	t _{PHL12}		276				"		2.7 V	IN	0.0 V	0.0 V	"	"	"	B 0 to Cn + 4	"	"	"	
			277				"		0.0 V	0.0 V	"	"	"	"	"	"	B 1 to Cn + 4	"	"	"
			278				"		"	"	"	"	IN	"	"	"	B 2 to Cn + 4	"	"	"
			279				"		"	"	"	IN	"	0.0 V	"	"	B 3 to Cn + 4	"	"	"
			280				"		"	"	IN	"	"	"	"	"	A 0 to Cn + 4	"	"	"
			281				"		0.0 V	"	"	"	"	"	"	"	A 1 to Cn + 4	14.0	"	"
			282				"		"	"	"	"	2.7 V	IN	"	"	A 2 to Cn + 4	"	"	"
			283				"		"	"	"	2.7 V	IN	0.0 V	0.0 V	"	A 3 to Cn + 4	"	"	"
			284				"		"	"	2.7 V	IN	0.0 V	0.0 V	"	"	B 0 to Cn + 4	"	"	"
			285				"		"	"	0.0 V	0.0 V	"	"	"	"	B 1 to Cn + 4	"	"	"
	t _{PHL12}		286				"	"	"	"	"	IN	"	"	B 2 to Cn + 4	"	"	"		
			287				"	"	"	"	IN	"	0.0 V	"	"	B 3 to Cn + 4	"	"	"	
			288				"	"	"	"	IN	"	0.0 V	0.0 V	"	"	A 0 to Cn + 4	"	"	"

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	1	2	3	4	5	6	7	8	9	10	11	12	Measured terminal	Limits	Unit
			Test no.	1	2	3	4	5	6	7	8	9	10	11	12		Min	Max
9 Tc = 25°C	t_{PHL3}	3003 Fig. 4	Case 3 J	289	B 0	A 0	S3	S2	S1	S0	Cn	M	F 0	F 1	F 2	GND		
				290	"	0.0 V	"	"	"	0.0 V	"	"	"	"	"	A 0 to P	2.5	9.5
				291	"	"	"	"	"	"	"	"	"	"	"	A 1 to P	"	"
				292	"	"	"	"	"	"	"	"	"	"	"	A 2 to P	"	"
				293	IN	2.7 V	"	"	"	"	"	"	"	"	"	A 3 to P	"	"
				294	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	B 0 to P	"	"
				295	"	"	"	"	"	"	"	"	"	"	"	B 1 to P	"	"
				296	"	"	"	"	"	"	"	"	"	"	"	B 2 to P	"	"
				297	"	IN	"	"	"	"	"	"	"	"	"	B 3 to P	"	"
				298	"	0.0 V	"	"	"	"	"	"	"	"	"	A 0 to P	8.0	"
				299	"	"	"	"	"	"	"	"	"	"	"	A 1 to P	"	"
				300	"	"	"	"	"	"	"	"	"	"	"	A 2 to P	"	"
				301	IN	2.7 V	"	"	"	"	"	"	"	"	"	A 3 to P	"	"
				302	0.0 V	0.0 V	"	"	"	"	"	"	"	"	"	B 0 to P	"	"
				303	"	"	"	"	"	"	"	"	"	"	"	B 1 to P	"	"
10	t_{PHL4}			304	"	"	"	"	"	"	"	"	"	"	"	B 2 to P	"	"
				305	"	IN	"	"	"	"	"	"	"	"	"	B 3 to P	"	"
				306	"	2.7 V	"	"	"	"	"	"	"	"	"	A 0 to A = B	5.5	13.5
				307	"	"	"	"	"	"	"	"	"	"	"	A 1 to A = B	"	"
				308	"	"	"	"	"	"	"	"	"	"	"	A 2 to A = B	"	"
				309	IN	"	"	"	"	"	"	"	"	"	"	A 3 to A = B	"	"
				310	0.0 V	"	"	"	"	"	"	"	"	"	"	B 0 to A = B	"	"
				311	"	"	"	"	"	"	"	"	"	"	"	B 1 to A = B	"	"
				312	"	"	"	"	"	"	"	"	"	"	"	B 2 to A = B	"	"
				313	"	IN	"	"	"	"	"	"	"	"	"	B 3 to A = B	"	"
				314	"	2.7 V	"	"	"	"	"	"	"	"	"	A 0 to A = B	11.0	27.0
				315	"	"	"	"	"	"	"	"	"	"	"	A 1 to A = B	"	"
				316	"	"	"	"	"	"	"	"	"	"	"	A 2 to A = B	"	"
				317	IN	"	"	"	"	"	"	"	"	"	"	A 3 to A = B	"	"
				318	0.0 V	"	"	"	"	"	"	"	"	"	"	B 0 to A = B	"	"
11				319	"	"	"	"	"	"	"	"	"	"	"	B 1 to A = B	"	"
				320	"	"	"	"	"	"	"	"	"	"	"	B 2 to A = B	"	"
																B 3 to A = B	"	"
10	Same tests and terminal conditions as for subgroup 9, except Tc = +125°C and use limits from table I.																	
11	Same tests and terminal conditions as for subgroup 9, except Tc = -55°C and use limits from table I.																	

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases J, K, L	13	14	15	16	17	18	19	20	21	22	23	24	Measured terminal	Limits		Unit		
				16	17	18	19	20	21	22	23	24	Min	Max							
9 Tc = 25°C	t _{PHL3}	3003 Fig. 4	Case 3 J	16	17	18	19	20	21	23	24	25	26	27	28						
			Test no.	F 3	A = B	P	Cn+4	G	B 3	A 3	B 2	A 2	B 1	A 1	V _{CC}						
			289			OUT			0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	5.0 V	A 0 to P	2.5	9.5	ns
			290			"			"	"	"	"	"	0.0 V	"	IN	"	A 1 to P	"	"	"
			291			"			"	"	"	"	"	IN	"	0.0 V	"	A 2 to P	"	"	"
			292			"			"	"	"	IN	"	0.0 V	"	"	"	A 3 to P	"	"	"
			293			"			"	"	"	0.0 V	"	"	"	"	"	B 0 to P	"	"	"
			294			"			"	"	"	"	"	"	IN	2.7 V	"	B 1 to P	"	"	"
			295			"			"	"	"	"	IN	2.7 V	0.0 V	0.0 V	"	B 2 to P	"	"	"
			296			"			"	"	IN	2.7 V	0.0 V	0.0 V	"	"	"	B 3 to P	"	"	"
			297			"			"	"	0.0 V	0.0 V	"	"	"	"	"	A 0 to P	"	8.0	"
			298			"			"	"	"	"	"	"	"	IN	"	A 1 to P	"	"	"
			299			"			"	"	"	"	"	IN	"	0.0 V	"	A 2 to P	"	"	"
			300			"			"	"	"	IN	"	0.0 V	"	"	"	A 3 to P	"	"	"
			301			"			"	"	"	0.0 V	"	"	"	"	"	B 0 to P	"	"	"
			302			"			"	"	"	"	"	"	IN	2.7 V	"	B 1 to P	"	"	"
			303			"			"	"	"	"	IN	2.7 V	0.0 V	0.0 V	"	B 2 to P	"	"	"
			304			"			"	"	IN	2.7 V	0.0 V	0.0 V	"	"	"	B 3 to P	"	"	"
			305			OUT			0.0 V	"	"	IN	2.7 V	0.0 V	2.7 V	"	"	A 0 to A = B	5.5	13.5	"
			306			"			"	"	"	"	"	"	2.7 V	"	IN	"	A 1 to A = B	"	"
307			"			"	"	"	"	"	"	IN	"	2.7 V	"	A 2 to A = B	"	"	"		
308			"			"	"	"	"	IN	"	2.7 V	"	"	"	A 3 to A = B	"	"	"		
309			"			"	"	"	"	2.7 V	"	"	"	"	"	B 0 to A = B	"	"	"		
310			"			"	"	"	"	"	"	"	IN	"	"	B 1 to A = B	"	"	"		
311			"			"	"	"	"	"	IN	"	0.0 V	"	"	B 2 to A = B	"	"	"		
312			"			"	"	"	IN	"	0.0 V	"	"	"	"	B 3 to A = B	"	"	"		
313			"			"	"	"	0.0 V	"	"	"	"	"	"	A 0 to A = B	11.0	27.0	"		
314			"			"	"	"	"	"	"	"	"	IN	"	A 1 to A = B	"	"	"		
315			"			"	"	"	"	"	"	IN	"	2.7 V	"	A 2 to A = B	"	"	"		
316			"			"	"	"	"	IN	"	2.7 V	"	"	"	A 3 to A = B	"	"	"		
317			"			"	"	"	"	2.7 V	"	"	"	"	"	B 0 to A = B	"	"	"		
318			"			"	"	"	"	"	"	"	IN	"	"	B 1 to A = B	"	"	"		
319			"			"	"	"	"	"	IN	"	0.0 V	"	"	B 2 to A = B	"	"	"		
320			"			"	"	"	IN	"	0.0 V	"	0.0 V	"	"	B 3 to A = B	"	"	"		
10	Same tests and terminal conditions as for subgroup 9, except T _C = +125°C and use limits from table I.																				
11	Class tests and terminal conditions as for subgroup 9, except T _C = -55°C and use limits from table I.																				

See footnotes at end of device type 01.

TABLE III. Group A inspection for device type 01 - Continued.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

- 1/ For cases 3 pins not referenced are N/C.
- 2/ I_{IL} limits (mA) min/max values for circuit shown:

Parameter	Test no.	A	B	C
I_{IL1}	58	-.25/- .60	-.03/- .60	-.25/- .60
I_{IL2}	59-66	-.75/-1.8	-.09/-1.8	-.75/-1.8
I_{IL3}	67-70	-1.0/-2.4	-.12/-2.4	-1.0/-2.4
I_{IL4}	71	-1.25/-3.0	-.15/-3.0	-1.25/-3.0

- 3/ $H \geq 1.5$ V, $L \leq 1.5$ V ; A = 2.5 V, B = 0.5 V.
- 4/ Perform function sequence at $V_{CC} = 4.5$ V and repeat at $V_{CC} = 5.5$ V.

TABLE III. Group A inspection for device type 02.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases E, F Case 2 J/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Limits		Measured terminal	Unit
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Min	Max		
1	V_{OH}	3006	1	$\bar{G} 1$	$\bar{P} 1$	$\bar{G} 0$	$\bar{P} 0$	$\bar{G} 3$	$\bar{P} 3$	$\bar{P}$	GND	Cn + z	$\bar{G}$	Cn + y	Cn + x	Cn	$\bar{G} 2$	$\bar{P} 2$	V_{CC}	2.5		$\bar{P}$	V
				2.0 V	0.8 V	2.0 V	2.0 V	2.0 V	0.8 V	-1.0 mA	GND	-1.0 mA				2.0 V	2.0 V	0.8 V	4.5 V			Cn + z	V
				2.0 V	2.0 V	2.0 V	"	"	2.0 V	"	"	"	-1.0 mA			0.8 V	0.8 V	2.0 V	"			$\bar{G}$	V
				0.8 V	0.8 V	0.8 V	"	"	"	"	"	"		-1.0 mA		0.8 V	0.8 V	0.8 V	"			Cn + y	V
				0.8 V	2.0 V	2.0 V	"	"	"	"	"	"		-1.0 mA		0.8 V	2.0 V	2.0 V	"			Cn + x	V
	V_{OL}	3007	6	2.0 V	2.0 V	0.8 V	0.8 V	2.0 V	0.8 V	20 mA	"	"			-1.0 mA	0.8 V	2.0 V	2.0 V	"			$\bar{P}$	"
				2.0 V	0.8 V	0.8 V	0.8 V	2.0 V	2.0 V	"	"	20 mA				2.0 V	2.0 V	0.8 V	"			Cn + z	"
				2.0 V	2.0 V	2.0 V	2.0 V	0.8 V	0.8 V	"	"	"	20 mA			"	"	2.0 V	"			$\bar{G}$	"
				"	"	"	0.8 V	2.0 V	"	"	"	"		20 mA		"	"	"	"			Cn + y	"
				"	"	"	2.0 V	2.0 V	"	"	"	"			20 mA	"	"	"	"			Cn + x	"
	V_{IC}		11	-18 mA							"	"							"			$\bar{G} 1$	-1.2
					-18 mA						"	"							"			$\bar{P} 1$	"
						-18 mA					"	"							"			$\bar{G} 0$	"
								-18 mA			"	"							"			$\bar{P} 0$	"
									-18 mA		"	"							"			$\bar{G} 3$	"
2	I_{HH1}	3010	20	2.7 V	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V		"	"				-18 mA		-18 mA	"			$\bar{P} 2$	"
				0.0 V	2.7 V	0.0 V	"	"	"		"	"				5.5 V	0.0 V	0.0 V	5.5 V			$\bar{G} 1$	20
				0.0 V	0.0 V	0.0 V	"	"	"		"	"				0.0 V	"	"	"			$\bar{P} 1$	"
				0.0 V	0.0 V	2.7 V	"	"	"		"	"				5.5 V	"	"	"			$\bar{G} 0$	"
				"	"	0.0 V	2.7 V	"	"		"	"				0.0 V	"	"	"			$\bar{P} 0$	"
				"	"	"	0.0 V	2.7 V	"		"	"				5.5 V	"	"	"			$\bar{G} 3$	"
				"	"	"	"	0.0 V	"		"	"				5.5 V	"	"	"			$\bar{P} 3$	"
				"	"	"	"	"	"		"	"				5.5 V	7.0 V	"	"			Cn	"
				"	"	"	"	"	"		"	"				0.0 V	0.0 V	7.0 V	"			$\bar{G} 2$	"
				"	"	"	"	"	"		"	"				0.0 V	0.0 V	7.0 V	"			$\bar{P} 2$	"
				7.0 V	"	"	"	"	"		"	"				5.5 V	"	0.0 V	"			$\bar{G} 1$	100
				0.0 V	7.0 V	"	"	"	"		"	"				0.0 V	"	"	"			$\bar{P} 1$	"
				"	0.0 V	7.0 V	"	"	"		"	"				5.5 V	"	"	"			$\bar{G} 0$	"
				"	"	0.0 V	7.0 V	"	"		"	"				0.0 V	"	"	"			$\bar{P} 0$	"
				"	"	"	0.0 V	7.0 V	"		"	"				5.5 V	"	"	"			$\bar{G} 3$	"
				"	"	"	"	0.0 V	"		"	"				5.5 V	"	"	"			$\bar{P} 3$	"
				"	"	"	"	"	7.0 V		"	"				7.0 V	"	"	"			Cn	"
				"	"	"	"	"	"		"	"				5.5 V	7.0 V	"	"			$\bar{G} 2$	"
				"	"	"	"	"	"		"	"				0.0 V	0.0 V	7.0 V	"			$\bar{P} 2$	"
				5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V		"	"				0.5 V	5.5 V	5.5 V	"			Cn	mA
	I_{HH2}		3009	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V		"	"				0.5 V	5.5 V	5.5 V	"			$\bar{P} 2$	2
											"	"							"				
											"	"							"				
											"	"							"				
											"	"							"				
											"	"							"				
											"	"							"				
											"	"							"				
											"	"							"				

See footnotes at end of device type 02.

TABLE III. Group A inspection for device type 02.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases E, F Case 2 1/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Measured terminal	Limits		Unit
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		Min	Max	
1	$T_c = 25^\circ\text{C}$	3009	I _{L2}	G 1	P 1	G 0	P 0	G 3	P 3	P	GND	Cn + z	G	Cn + y	Cn + x	Cn	G 2	P 2	V _{cc}	P 3	2/	2/	mA
				5.5 V	5.5 V	5.5 V	5.5 V	5.5 V	0.5 V							5.5 V	5.5 V	5.5 V	5.5 V	P 2	"	"	"
				"	"	"	"	"	5.5 V							"	"	0.5 V	"	P 2	"	"	"
				"	0.5 V	"	"	"	"							"	"	5.5 V	"	P 1	"	"	"
				"	5.5 V	"	0.5 V	"	"							"	"	"	"	P 0	"	"	"
				"	"	"	5.5 V	0.5 V	"							0.0 V	"	"	"	G 3	"	"	"
				"	"	"	"	5.5 V	"							"	"	"	"	G 0	"	"	"
				"	"	"	5.5 V	"	"							"	0.5 V	"	"	G 2	"	"	"
				"	"	"	"	"	"							"	0.5 V	"	"	G 1	"	"	"
				"	0.5 V	"	"	"	"	0.0 V						5.5 V	5.5 V	"	"	P	-60	-150	"
				"	5.5 V	0.0 V	0.0 V	0.0 V	0.0 V			0.0 V				5.5 V	0.0 V	0.0 V	"	Cn + z	"	"	"
2	$T_c = 25^\circ\text{C}$	3011	I _{os}	48	5.5 V	5.5 V	5.5 V	5.5 V	5.5 V				0.0 V			0.0 V	5.5 V	5.5 V	"	G	"	"	"
				"	"	"	"	"	"							"	"	"	"	Cn + y	"	"	"
				"	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V					0.0 V	0.0 V	5.5 V	"	"	"	Cn + x	"	"	"
				"	0.0 V	"	0.0 V	"	"							5.5 V	"	"	"	"	"	"	"
				"	4.5 V	"	4.5 V	"	"	2.5 V						5.5 V	4.5 V	0.0 V	4.5 V	P	60	"	"
				"	0.0 V	"	0.0 V	"	"	"			2.5 V			"	"	"	"	Cn + z	"	"	"
				"	4.5 V	4.5 V	4.5 V	0.0 V	"				2.5 V			"	"	"	"	G	"	"	"
				"	"	"	0.0 V	0.0 V	4.5 V	"				2.5 V		"	"	"	"	Cn + y	"	"	"
				"	"	"	4.5 V	4.5 V	"	"					2.5 V	"	"	"	"	Cn + x	"	"	"
				"	0.0 V	0.0 V	0.0 V	0.0 V	5.5 V							0.0 V	0.0 V	0.0 V	5.5 V	V _{cc}	"	28	"
				"	5.5 V	0.0 V	0.0 V	0.0 V	0.0 V							0.0 V	5.5 V	0.0 V	5.5 V	V _{cc}	"	36	"
3	$T_c = 25^\circ\text{C}$	3014	Functional test 3/	59	B	B	B	B	B	L	GND	H	L	H	H	B	B	B	4/	All outputs			
				60	"	A	B	"	"	H	"	"	"	"	"	"	"	"	"	"	"	"	"
				61	"	B	"	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				62	"	"	"	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				63	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				64	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				65	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				66	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				67	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				68	"	B	A	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				69	"	B	A	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"
8	$T_c = 25^\circ\text{C}$	3004 Fig. 4	t _{PH1}	70	A	B	A	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				71	"	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				72	"	B	A	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				73	"	A	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
				74	2.7 V	0.0 V	2.7 V	0.0 V	0.0 V	0.0 V	GND	"	"	"	OUT	IN	2.7 V	0.0 V	5.0 V	Cn to Cn + x	3.0	9.0	ns
				75	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	Cn to Cn + y	"	"	"
				76	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to Cn + z	"	"	"
				77	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	Cn to Cn + x	"	"	"
				78	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	Cn to Cn + y	"	"	"
				79	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to Cn + z	"	"	"

See footnotes at end of device type 02.

TABLE III. Group A inspection for device type 02.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases E, F Case 2 J/ Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Measured terminal	Limits		Unit	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		Min	Max		
9 T _C = 25°C	t _{PH2}	3004 Fig. 4	80	G 1	P 1	G 0	P 0	G 3	P 3	P	GND	Cn + z	G	Cn + y	Cn + x	Cn	G 2	P 2	5.0 V	P 0 to Cn + x	1.0	5.0	ns	
			81	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	P 0 to Cn + y	"	"	"
			82	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	P 0 to Cn + z	"	"	"
			83	"	IN	"	0.0 V	"	"	"	"	"	"	OUT	OUT	"	"	"	"	"	P 1 to Cn + y	"	"	"
			84	"	IN	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	P 1 to Cn + z	"	"	"
	85	"	0.0 V	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	IN	"	P 2 to Cn + z	"	"	"	
	86	"	"	"	"	IN	"	"	"	"	"	"	"	"	OUT	"	"	0.0 V	"	P 0 to Cn + x	2.5	8.5	"	
	87	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	P 0 to Cn + y	"	"	"	
	88	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	P 0 to Cn + z	"	"	"	
	89	"	IN	"	0.0 V	"	0.0 V	"	"	"	"	"	"	OUT	"	"	"	"	"	P 1 to Cn + y	"	"	"	
	90	"	IN	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	P 1 to Cn + z	"	"	"	
	91	"	0.0 V	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	IN	"	P 2 to Cn + z	"	"	"	
	92	2.7 V	0.0 V	IN	0.0 V	0.0 V	0.0 V	0.0 V	0.0 V	"	"	"	"	"	OUT	0.0 V	2.7 V	0.0 V	"	G 0 to Cn + x	1.0	5.2	"	
	93	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	G 0 to Cn + y	"	"	"	
	94	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	G 0 to Cn + z	"	"	"	
	95	"	"	"	"	2.7 V	"	"	"	"	"	"	"	"	OUT	2.7 V	"	"	"	G 0 to Cn + x	"	"	"	
	96	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	G 0 to Cn + y	"	"	"	
97	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	G 0 to Cn + z	"	"	"		
98	IN	"	2.7 V	0.0 V	"	"	0.0 V	"	"	"	"	"	"	OUT	"	0.0 V	"	"	G 1 to Cn + y	"	"	"		
99	"	2.7 V	"	"	"	"	"	"	"	"	"	OUT	"	"	"	2.7 V	"	"	G 1 to Cn + z	"	"	"		
100	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	G 1 to Cn + y	"	"	"		
101	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	G 1 to Cn + z	"	"	"		
102	"	0.0 V	"	2.7 V	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	G 1 to Cn + y	"	"	"		
103	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	G 1 to Cn + z	"	"	"		
104	2.7 V	"	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	0.0 V	IN	"	"	G 2 to Cn + z	"	"	"	
105	"	"	"	2.7 V	"	"	2.7 V	"	"	"	"	"	"	"	"	2.7 V	"	"	"	G 2 to Cn + z	"	"	"	
106	"	2.7 V	"	0.0 V	"	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	G 2 to Cn + z	"	"	"	
107	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	G 2 to Cn + z	"	"	"	

See footnotes at end of device type 02.

TABLE III. Group A inspection for device type 02.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases E, F Case 2 J	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Measured terminal	Limits		Unit
																					Min	Max	
9	t_{PH3} $T_C = 25^\circ\text{C}$	3004 Fig. 4	Test no.	G 1	P 1	G 0	P 0	G 3	P 3	P	GND	Cn + z	G	Cn + y	Cn + x	Cn	G 2	P 2	V _{CC}	G 0 to Cn + x	2.5	8.5	ns
				2.7 V	0.0 V	IN	0.0 V	0.0 V	0.0 V					OUT	OUT				5.0	G 0 to Cn + y	"	"	"
				"	"	"	"	"	"		"					"	"	"	"	G 0 to Cn + z	"	"	"
				"	"	"	2.7 V	"	"		"	OUT			OUT	2.7 V	"	"	"	G 0 to Cn + x	"	"	"
				"	"	"	"	"	"		"			OUT		"	"	"	"	G 0 to Cn + y	"	"	"
				"	"	"	"	"	"		"	OUT				"	"	"	"	G 0 to Cn + z	"	"	"
				IN	"	2.7 V	0.0 V	"	"		"			OUT		0.0 V	"	"	"	G 1 to Cn + y	"	"	"
				"	2.7 V	"	"	"	"		"	OUT				2.7 V	"	"	"	G 1 to Cn + z	"	"	"
				"	"	"	"	"	"		"			OUT		"	"	"	"	G 1 to Cn + y	"	"	"
				"	"	"	"	"	"		"	OUT				"	"	"	"	G 1 to Cn + z	"	"	"
				"	0.0 V	"	2.7 V	"	"		"			OUT		"	"	"	"	G 1 to Cn + y	"	"	"
				"	"	"	0.0 V	"	"		"					0.0 V	IN	"	"	G 2 to Cn + z	"	"	"
				"	"	"	2.7 V	"	"		"					2.7 V	"	"	"	G 2 to Cn + z	"	"	"
				"	2.7 V	"	0.0 V	"	"		"					"	"	"	"	G 2 to Cn + z	"	"	"
				"	"	"	"	"	"		"					"	"	2.7 V	"	G 2 to Cn + z	"	"	"
				"	0.0 V	"	"	2.7 V	"		"		OUT			0.0 V	2.7 V	0.0 V	"	G 2 to Cn + z	"	"	"
				"	IN	0.0 V	"	"	"		"					"	"	IN	"	P 1 to G	"	8.0	"
				"	0.0 V	"	2.7 V	"	"		"					"	"	"	"	P 2 to G	"	"	"
				"	0.0 V	"	0.0 V	"	IN		"					"	"	0.0 V	"	P 3 to G	"	"	"
				2.7 V	IN	"	0.0 V	"	0.0 V		"					"	"	0.0 V	"	P 1 to G	"	10.0	"
				2.7 V	0.0 V	"	2.7 V	"	0.0 V		"					"	"	IN	"	P 2 to G	"	"	"
				0.0 V	"	"	0.0 V	"	IN		"					"	"	0.0 V	"	P 3 to G	"	"	"
				2.7 V	"	IN	"	"	0.0 V		"					2.7 V	"	"	"	G 0 to G	"	7.5	"
				IN	"	2.7 V	"	"	"		"					"	"	"	"	G 1 to G	"	"	"
				IN	2.7 V	0.0 V	"	"	"		"					"	"	"	"	G 1 to G	"	"	"
				2.7 V	0.0 V	2.7 V	"	"	"		"					"	IN	"	"	G 2 to G	"	"	"
				"	2.7 V	0.0 V	"	"	"		"					"	"	"	"	G 2 to G	"	"	"
				"	0.0 V	0.0 V	"	"	"		"					"	"	2.7 V	"	G 2 to G	"	"	"
				"	0.0 V	2.7 V	"	IN	"		"					"	2.7 V	0.0 V	"	G 3 to G	"	"	"
				"	2.7 V	0.0 V	"	"	"		"					"	"	0.0 V	"	G 3 to G	"	"	"
				"	0.0 V	"	"	"	"		"					"	"	2.7 V	"	G 3 to G	"	"	"
				"	0.0 V	"	"	"	2.7 V		"					"	"	0.0 V	"	G 3 to G	"	"	"
				"	"	"	"	"	"		"					"	"	"	"	G 3 to G	"	"	"

See footnotes at end of device type 02.

TABLE III. Group A inspection for device type 02.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases E, F	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Measured terminal	Limits		Unit			
				2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Min		Max					
9	t _{PLH5}	3004 Fig. 4	Case 2 J/	G 1	P 1	G 0	P 0	G 3	P 3	P	GND	Cn + z	G	Cn + y	Cn + x	Cn	G 2	P 2	0.0 V	5.0 V	V _{CC}					
			Test no.	140	2.7 V	0.0 V	IN	0.0 V	2.7 V	0.0 V	0.0 V	IN	0.0 V	2.7 V	OUT			2.7 V	2.7 V	0.0 V	0.0 V					
				141	IN	0.0 V	2.7 V																			
				142	IN	2.7 V	0.0 V																			
				143	2.7 V	0.0 V	2.7 V												IN							
				144	"	2.7 V	0.0 V																			
				145	"	0.0 V	0.0 V													2.7 V						
				146	"	0.0 V	2.7 V		IN										2.7 V	0.0 V						
				147	"	2.7 V	0.0 V													0.0 V						
				148	"	0.0 V														2.7 V						
				149	"	"	"	"	"	"	"	2.7 V								0.0 V						
				150	0.0 V	"	"	"	IN	0.0 V	0.0 V	OUT						0.0 V	0.0 V	"	"	P 0 to P	1.5	5.5	"	
				151	"	IN	"	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	P 1 to P	"	"	"
				152	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	P 2 to P	"	"	"
				153	"	"	"	"	"	"	"	IN	"	"	"	"	"	"	"	0.0 V	"	"	P 3 to P	"	"	"
				154	"	"	"	"	IN	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	P 0 to P	2.5	7.5	"
				155	"	"	IN	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	"	P 1 to P	"	"	"
	156	"	"	0.0 V	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	P 2 to P	"	"	"			
	157	"	"	"	"	"	"	"	IN	"	"	"	"	"	"	"	0.0 V	"	"	P 3 to P	"	"	"			
10	Same tests, terminal conditions, and limits as for subgroup 9, except T _C = +125°C and use limits from table I.																									
11	Same tests, terminal conditions and limits as for subgroup 9, except T _C = -55°C and use limits from table I.																									

1/ For case 2 pins not referenced are NC.

2/ I_L limits (mA) min/max values for circuit shown:

Parameter	Test no.	A	B
I _{L1}	38	-0.5/-1.2	-0.5/-1.2
I _{L2}	39	-1.0/-2.4	-0.1/-2.4
I _{L3}	40	-1.5/-3.6	-1.5/-3.6
I _{L4}	41 - 43	-2.0/-4.8	-1.5/-3.6
I _{L5}	44 - 45	-3.5/-8.4	-3.5/-8.4
I _{L6}	46	-4.0/-9.6	-4.0/-9.6

3/ H ≥ 1.5 V, L ≤ 1.5 V; A = 2.5 V, B = 0.5 V.

4/ Perform function sequence at V_{CC} = 4.5 V and repeat at V_{CC} = 5.5 V.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{CC}		Min	Max	
1 Tc = 25°C	V _{OH}	3006	1	0.8 V	0.8 V	0.8 V	0.8 V	2.0 V	0.8 V	0.8 V	-1 mA	-1 mA	GND					0.8 V	0.8 V	0.8 V	0.8 V	0.8 V	4.5 V	F0	2.5		V
			2	"	"	"	"	"	"	"				-1 mA				"	"	"	"	"	"	F1	"		"
			3	"	"	"	"	"	"	"					-1 mA			"	"	"	"	"	"	F2	"		"
			4	"	"	"	"	"	"	"					-1 mA			"	"	"	"	"	"	F3	"		"
			5	"	"	"	"	"	"	"						-1 mA			"	"	"	"	"	G	"		"
			6	"	2.0 V	"	2.0 V	0.8 V	"	2.0 V							-1 mA		2.0 V	2.0 V	"	2.0 V	"	P	"		"
			7	"	"	"	"	2.0 V	2.0 V	0.8 V	-1 mA							0.8 V	"	"	"	"	"	F0	"		"
			8	"	"	"	"	"	"	"	-1 mA							"	"	"	"	"	"	F1	"		"
			9	"	"	"	"	"	"	"				-1 mA				"	"	"	"	"	"	F2	"		"
			10	"	"	"	"	"	"	"					-1 mA			"	"	"	"	"	"	F3	"		"
			11	"	"	"	"	"	"	"						-1 mA		"	"	"	"	"	"	G	"		"
			12	"	0.8 V	"	0.8 V	"	"	2.0 V							-1 mA		2.0 V	0.8 V	"	0.8 V	"	P	"		"
			13	2.0 V	2.0 V	2.0 V	2.0 V	"	0.8 V	"	-1 mA							"	2.0 V	2.0 V	2.0 V	2.0 V	"	F0	"		"
			14	"	"	"	"	"	"	"								"	"	"	"	"	"	F1	"		"
			15	"	"	"	"	"	"	"				-1 mA				"	"	"	"	"	"	F2	"		"
			16	"	"	"	"	"	"	"					-1 mA			"	"	"	"	"	"	F3	"		"
			17	"	"	"	"	"	"	"						-1 mA		"	"	"	"	"	"	G	"		"
V _{OL}	V _{OL}	3007	18	0.8 V	2.0 V	0.8 V	2.0 V	0.8 V	2.0 V	0.8 V	2.0 V	20 mA						0.8 V	2.0 V	0.8 V	0.8 V	0.8 V	"	F0	0.5		"
			19	"	"	"	"	"	"	"		20 mA						"	"	"	"	"	"	F1	"		"
			20	"	"	"	"	"	"	"				20 mA				"	"	"	"	"	"	F2	"		"
			21	"	"	"	"	"	"	"					20 mA			"	"	"	"	"	"	F3	"		"
			22	2.0 V	0.8 V	2.0 V	0.8 V	"	"	"						20 mA		"	0.8 V	2.0 V	0.8 V	2.0 V	"	G	"		"
			23	"	0.8 V	"	0.8 V	"	"	"							20 mA		"	0.8 V	"	0.8 V	"	P	"		"
			24	"	2.0 V	"	2.0 V	"	0.8 V	2.0 V	20 mA							2.0 V	2.0 V	"	"	2.0 V	"	F0	"		"
			25	"	"	"	"	"	"	"		20 mA						"	"	"	"	"	"	F1	"		"
			26	"	"	"	"	"	"	"				20 mA				"	"	"	"	"	"	F2	"		"
			27	"	"	"	"	"	"	"					20 mA			"	"	"	"	"	"	F3	"		"
			28	"	"	"	"	"	"	"						20 mA		"	"	"	"	"	"	G	"		"
			29	"	"	"	"	"	"	"								20 mA	"	"	"	"	"	P	"		"
			30	0.8 V	0.8 V	0.8 V	0.8 V	"	2.0 V	"	20 mA							"	0.8 V	0.8 V	0.8 V	0.8 V	"	F0	"		"
			31	"	"	"	"	"	"	"		20 mA						"	"	"	"	"	"	F1	"		"
			32	"	"	"	"	"	"	"				20 mA				"	"	"	"	"	"	F2	"		"
			33	"	"	"	"	"	"	"					20 mA			"	"	"	"	"	"	F3	"		"
			34	"	"	"	"	"	"	"						20 mA		"	"	"	"	"	"	G	"		"
			35	"	"	"	"	"	"	"							20 mA		"	"	"	"	"	P	"		"
V _{IC}	V _{IC}		36	-18 mA														"	"	"	"	"	"	A1	-1.2		"
			37		-18 mA													"	"	"	"	"	"	B1	"		"
			38			-18 mA												"	"	"	"	"	"	A0	"		"
			39				-18 mA											"	"	"	"	"	"	B0	"		"
			40					-18 mA										"	"	"	"	"	"	S0	"		"
			41						-18 mA									"	"	"	"	"	"	S1	"		"
			42							-18 mA								"	"	"	"	"	"	S2	"		"
			43															-18 mA	"	"	"	"	"	Cn	"		"
			44															"	"	"	"	"	"	B3	"		"
			45															"	"	-18 mA	-18 mA	"	"	A3	"		"
			46															"	"	"	"	"	"	B2	"		"
			47															"	"	"	"	"	"	A2	"		"
			48					0.5 V										"	"	"	-18 mA	-18 mA	5.5 V	S0	1/		mA
			49						0.5 V									"	"	"	"	"	"	S1	"		"
			50							0.5 V								"	"	"	"	"	"	S2	"		"
I _{IL1}	I _{IL1}	3009	47															"	"	"	"	"	"	A2	"		"
			48															"	"	"	"	"	"	S0	1/		"
"	"	"	49															"	"	"	"	"	"	S1	"		"
			50															"	"	"	"	"	"	S2	"		"

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit		
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{cc}		Min	Max			
7 Tc = 25°C	Functional tests 2/	3014	105	A	A	A	A	A	B	B	L	L	GND	L	L	H	L	A	A	A	A	A	A	3/	All				
			106	B	B	B	B	B	A	"	H	H	"	H	H	"	L	B	B	B	B	B	B	"	outputs				
			107	B	A	B	A	"	"	"	L	L	"	L	L	"	H	"	A	B	A	B	A	B	"	"			
			108	A	B	A	B	"	"	"	L	H	"	H	H	"	L	"	"	B	A	B	A	B	"	"			
			109	A	A	A	A	"	"	"	H	H	"	H	H	"	H	"	"	A	A	A	A	A	"	"			
			110	B	B	B	B	"	"	"	L	L	"	L	L	"	L	"	"	B	B	B	B	B	"	"			
			111	B	A	B	A	"	"	"	H	L	"	L	L	"	L	"	H	"	A	B	A	B	"	"			
			112	A	B	A	A	"	"	"	H	H	"	L	L	"	L	"	"	B	A	B	A	A	"	"			
			113	A	A	A	A	"	"	"	L	L	"	L	L	"	L	"	"	A	A	A	A	A	"	"			
			114	B	B	B	B	A	"	"	L	L	"	L	L	"	H	B	B	B	B	B	B	B	"	"			
			115	B	A	B	A	"	"	"	H	H	"	H	"	"	H	"	"	"	A	B	A	B	"	"			
			116	A	B	A	B	"	"	"	H	"	"	"	"	"	"	"	"	B	A	B	A	A	"	"			
			117	A	A	A	A	"	"	"	L	L	"	"	"	"	L	"	"	"	A	A	A	A	"	"			
			118	B	B	B	B	"	"	"	H	L	"	L	L	"	L	H	A	B	B	B	B	A	"	"			
			119	B	A	B	A	"	"	"	L	"	"	"	"	"	"	"	"	"	A	B	A	B	"	"			
			120	A	B	A	B	"	"	"	L	"	"	"	"	"	"	"	"	"	B	A	B	A	"	"			
			121	A	A	A	A	"	"	"	H	H	"	H	"	"	H	L	"	"	A	A	A	A	"	"			
122	B	B	B	B	B	B	A	L	L	"	L	L	"	L	H	B	B	B	B	B	"	"							
123	B	A	B	A	"	"	"	H	H	"	H	"	"	H	"	"	"	A	B	A	B	"	"						
124	A	B	A	B	"	"	"	H	H	"	H	"	"	H	"	"	"	B	A	B	A	"	"						
125	A	A	A	A	"	"	"	L	L	"	L	"	"	L	"	"	"	A	A	A	A	"	"						
126	B	B	B	B	A	"	"	L	L	"	L	"	"	L	H	"	"	B	B	B	B	"	"						
127	B	A	B	A	"	"	"	H	H	"	H	"	"	H	"	"	"	A	B	A	B	"	"						
128	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B	A	B	A	"	"					
129	A	A	A	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A	A	A	A	"	"					
130	B	B	B	B	B	A	"	L	L	"	L	"	"	L	"	"	"	B	B	B	B	"	"						
131	B	A	B	A	"	"	"	"	"	"	"	"	"	"	H	H	"	A	B	A	B	"	"						
132	A	B	A	B	"	"	"	"	"	"	"	"	"	"	L	"	"	B	A	B	A	"	"						
133	A	A	A	A	"	"	"	H	H	"	H	"	"	H	"	"	"	A	A	A	A	"	"						
134	B	B	B	B	A	"	"	"	"	"	"	"	"	"	"	"	"	B	B	B	B	"	"						
135	B	A	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A	B	A	B	"	"					
136	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B	A	B	A	"	"					
8			Same tests, terminal conditions, and limits as for subgroup 7, except Tc = +125°C and Tc = -55°C.	137	A	A	A	A	A	"	"	"	"	"	"	"	"	"	A	A	A	A	"	"					
9 Tc = 25°C	t _{PH1} Fig. 4	3003	138	GND	GND	GND	GND	2.7 V	GND	GND	OUT	OUT	GND					IN	GND	GND	GND	GND	5.0 V	Cn to F0	2.5	12	ns		
			139	"	"	"	"	"	"	"	"	OUT	OUT	"	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"		
			140	"	"	"	"	"	"	"	"	"	"	OUT	OUT	"	"	"	"	"	"	"	"	"	Cn to F2	"	"	"	
			141	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	"	"	"	
			142	"	"	"	"	"	GND	2.7 V	"	OUT	OUT	"	"	"	"	"	"	"	"	"	"	"	Cn to F0	"	"	"	
			143	"	"	"	"	"	"	"	"	"	"	OUT	OUT	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"	
			144	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F2	"	"	"	
			145	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	"	"	"	
			146	"	2.7 V	"	2.7 V	"	"	OUT	OUT	"	"	"	"	"	OUT	"	"	2.7 V	"	"	2.7 V	"	"	Cn to F0	"	"	"
			147	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"	
			148	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F2	"	"	"	
			149	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	"	"	"	
			150	"	GND	"	GND	"	GND	"	OUT	OUT	"	"	"	"	"	"	"	GND	"	"	"	"	Cn to F0	8	"	"	
			151	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"	
			152	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	Cn to F2	"	"	"	
			153	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	Cn to F3	"	"	"	
			154	"	"	"	"	"	GND	2.7 V	"	OUT	OUT	"	"	"	"	"	"	"	"	"	"	"	Cn to F0	"	"	"	
155	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"				
156	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F2	"	"	"				
157	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	"	"	"				
158	"	2.7 V	"	2.7 V	"	"	OUT	OUT	"	"	"	"	"	"	"	"	2.7 V	"	"	2.7 V	"	"	Cn to F0	"	"	"			
159	"	"	"	"	"	"	"	"	"	"	OUT	OUT	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"				
160	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F2	"	"	"				
161	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	"	"	"				

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 R, S, 2 method	Cases Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit		
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{cc}		Min	Max			
9 Tc = 25°C	t _{PH2}	3003 Fig. 4	162	IN	2.7 V	IN	2.7 V	2.7 V	GND	GND	OUT	OUT	GND	GND				2.7 V	2.7 V		2.7 V		5.0 V	A0 to F0	3.0	15	ns		
			163	IN	"	"	"	"	"	"	"	OUT	"					"	"	"	"	"	"	A1 to F1	"	"	"		
			164	"	"	"	"	"	"	"	"	"	OUT	"				"	"	"	"	"	"	A2 to F2	"	"	"		
			165	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	"	A3 to F3	"	"	"	
			166	"	"	IN	"	GND	2.7 V	"	OUT	OUT	"	"	"			GND	"	"	"	"	"	"	A0 to F0	"	"	"	
			167	IN	"	"	"	"	"	"	"	"	OUT	"	OUT			"	"	"	"	"	IN	"	A1 to F1	"	"	"	
			168	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	"	A2 to F2	"	"	"	
			169	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	A3 to F3	"	"	"	
			170	"	"	IN	"	2.7 V	"	"	OUT	"	"	"	"			2.7 V	"	"	"	"	"	"	A0 to F0	"	"	"	
			171	IN	"	"	"	"	"	"	"	OUT	"	"	"	OUT			"	"	"	"	"	"	A1 to F1	"	"	"	
			172	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	IN	"	A2 to F2	"	"	"	
			173	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	A3 to F3	"	"	"	
			174	"	GND	IN	"	GND	GND	2.7 V	OUT	"	"	"	"			GND	GND	"	"	"	"	"	A0 to F0	"	"	"	
			175	IN	"	"	"	"	"	"	"	OUT	"	"	"	OUT			"	"	"	"	"	"	A1 to F1	"	"	"	
			176	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	IN	"	A2 to F2	"	"	"	
			177	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	A3 to F3	"	"	"	
	t _{PH2}		178	"	2.7 V	IN	2.7 V	2.7 V	GND	GND	OUT	"	"	"			2.7 V	2.7 V		2.7 V		"	A0 to F0	3.0	12.5	"			
			179	IN	"	"	"	"	"	"	OUT	"	OUT	"			"	"	"	"	"	"	"	A1 to F1	"	"	"		
			180	"	"	"	"	"	"	"	"	"	OUT	"	"	OUT			"	"	"	"	IN	"	A2 to F2	"	"	"	
			181	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	A3 to F3	"	"	"	
			182	"	"	IN	"	GND	2.7 V	"	OUT	"	"	"	"			GND	"	"	"	"	"	"	A0 to F0	"	"	"	
			183	IN	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	A1 to F1	"	"	"	
			184	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	"	A2 to F2	"	"	"	
			185	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	A3 to F3	"	"	"	
			186	"	"	IN	"	2.7 V	"	"	OUT	"	"	"	"			2.7 V	"	"	"	"	"	"	A0 to F0	"	"	"	
			187	IN	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	A1 to F1	"	"	"	
			188	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	IN	"	A2 to F2	"	"	"	
			189	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	A3 to F3	"	"	"	
			190	"	GND	IN	"	GND	GND	2.7 V	OUT	"	"	"	"	"	"	GND	GND	"	"	"	"	"	A0 to F0	"	"	"	
			191	IN	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	A1 to F1	"	"	"	
			192	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A2 to F2	"	"	"	
			193	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A3 to F3	"	"	"	
	t _{PH3}		194	2.7 V	"	2.7 V	IN	2.7 V	GND	GND	OUT	"	"	"	OUT			"	"	IN	"	2.7 V	"	B0 to F0	"	15	"		
			195	"	IN	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"	
			196	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	"	B2 to F2	"	"	"	
			197	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	"	B3 to F3	"	"	"
			198	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	"	B0 to F0	"	"	"	
			199	"	IN	"	GND	2.7 V	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"	
			200	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"	
			201	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to F3	"	"	"	
			202	"	"	IN	"	2.7 V	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	B0 to F0	"	"	"	
			203	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"	
			204	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"	
			205	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to F3	"	"	"	
			206	"	"	"	IN	GND	GND	2.7 V	OUT	"	"	"	"	"	"	"	GND	"	"	"	"	"	B0 to F0	"	"	"	
			207	"	"	IN	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"	
			208	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"	
			209	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to F3	"	"	"	
210	GND	"	GND	IN	2.7 V	"	"	OUT	"	"	"	"	"	"	"	"	"	"	GND	"	GND	"	B0 to F0	"	"	"			
211	"	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"				
212	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"				
213	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to F3	"	"	"				
214	2.7 V	"	"	IN	GND	2.7 V	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	B0 to F0	"	"	"			
215	"	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"				
216	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"				
217	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	"	B3 to F3	"	"	"			

See footnotes at end of device type 03.

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 R, S, 2 method	Cases Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit		
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{cc}	Min	Max				
9 Tc = 25°C	t _{PHL3}	3003 Fig. 4	218	2.7 V	"	2.7 V	IN	2.7 V	GND	GND	OUT	OUT	"	"	"	"	"	GND	"	2.7 V	"	"	5.0 V	B0 to F0	3.0	12.5	ns		
			219	"	IN	"	"	"	"	"	"	"	OUT	"	OUT	"	"	"	"	"	"	"	"	B1 to F1	"	"	"		
			220	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"	
			221	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	"	B3 to F3	"	"	"	
			222	"	"	"	IN	GND	2.7 V	"	OUT	OUT	"	"	"	"	"	2.7 V	"	"	"	"	"	"	B0 to F0	"	"	"	
			223	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	IN	"	"	B1 to F1	"	"	"	
			224	"	"	"	"	"	"	"	"	"	"	"	OUT	OUT	"	"	"	"	"	"	"	"	B2 to F2	"	"	"	
			225	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	"	B3 to F3	"	"	"	
			226	"	"	"	IN	2.7 V	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	B0 to F0	"	"	"	
			227	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"	
			228	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	B2 to F2	"	"	"	
			229	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GND	"	"	"	"	B3 to F3	"	"	"	
			230	"	"	"	IN	GND	GND	2.7 V	OUT	"	"	OUT	"	"	"	"	"	"	"	"	"	"	B0 to F0	"	"	"	
			231	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"	
			232	"	"	"	"	"	"	"	"	"	"	"	"	OUT	OUT	"	"	"	"	IN	"	"	B2 to F2	"	"	"	
			233	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to F3	"	"	"	
			234	GND	"	GND	IN	2.7 V	"	"	OUT	"	"	OUT	"	"	"	"	"	"	"	"	"	"	B0 to F0	"	"	"	
			235	"	"	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"	
			236	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	IN	"	"	B2 to F2	"	"	"	
			237	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to F3	"	"	"	
			238	2.7 V	"	2.7 V	IN	GND	2.7 V	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	B0 to F0	"	"	"
			239	"	IN	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"	
			240	"	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	IN	"	"	B2 to F2	"	"	"	
			241	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to F3	"	"	"	
t _{PLH4}		242	GND	GND	GND	IN	"	GND	OUT	"	"	OUT	"	"	"	"	"	"	GND	"	"	GND	"	S0 to F0	"	20.0	"		
		243	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F1	"	"	"			
		244	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F2	"	"	"			
		245	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F3	"	"	"			
		246	"	2.7 V	"	2.7 V	2.7 V	IN	"	OUT	"	"	"	"	"	"	2.7 V	2.7 V	"	"	2.7 V	"	"	S1 to F0	"	"	"		
		247	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F1	"	"	"		
		248	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F2	"	"	"		
		249	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F3	"	"	"		
		250	"	GND	"	GND	"	GND	IN	OUT	"	"	"	"	"	"	"	"	GND	"	"	GND	"	S2 to F0	"	"	"		
		251	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	S2 to F1	"	"	"		
t _{PHL4}		252	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F2	"	"	"		
		253	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F3	"	"	"		
		254	"	"	"	"	"	IN	2.7 V	GND	OUT	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F0	"	14.0	"		
		255	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	S0 to F1	"	"	"		
		256	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F2	"	"	"		
		257	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F3	"	"	"		
		258	"	2.7 V	"	2.7 V	2.7 V	IN	"	OUT	"	"	"	"	"	"	2.7 V	2.7 V	"	"	2.7 V	"	"	S1 to F0	"	"	"		
		259	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F1	"	"	"		
		260	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F2	"	"	"		
		261	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F3	"	"	"		
t _{PLH5}		262	"	GND	"	GND	"	GND	IN	OUT	"	"	"	"	"	"	"	GND	"	"	GND	"	"	S2 to F0	"	"	"		
		263	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	S2 to F1	"	"	"		
		264	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F2	"	"	"		
		265	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F3	"	"	"		
		266	2.7 V	2.7 V	IN	2.7 V	2.7 V	"	GND	"	"	"	"	"	"	"	"	"	2.7 V	2.7 V	2.7 V	"	"	A0 to G	"	11.5	"		
		267	"	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	A1 to G	"	"	"	
		268	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	A2 to G	"	"	"			
		269	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	2.7 V	"	"	A3 to G	"	"	"	

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 R, S, 2 method	Cases Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit			
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{cc}		Min	Max				
9 Tc = 25°C	t _{PLH5}	3003 Fig. 4	270	GND	GND	IN	GND	GND	2.7 V	GND						OUT		GND	GND	GND	GND	GND	5.0 V	A0 to G	3.0	11.5	ns			
			271	IN	"	GND	"	"	"	"						"		"	"	"	"	GND	"	A1 to G	"	"	"			
			272	GND	"	"	"	"	"	"						"		"	"	"	"	IN	"	A2 to G	"	"	"			
			273	"	"	"	"	"	"	"						"		"	"	"	"	GND	"	A3 to G	"	"	"			
			274	"	2.7 V	IN	2.7 V	2.7 V	"	"						"		2.7 V	2.7 V	GND	2.7 V	"	"	A0 to G	"	"	"			
			275	IN	"	GND	"	"	"	"						"		"	"	"	"	"	"	A1 to G	"	"	"			
			276	GND	"	"	"	"	"	"						"		"	"	"	"	IN	"	A2 to G	"	"	"			
	t _{PHL5}		277	GND	"	"	"	"	"	"						"		"	"	"	IN	"	GND	"	A3 to G	"	"	"		
			278	2.7 V	2.7 V	IN	"	"	GND	"						"		GND	"	"	2.7 V	"	2.7 V	"	A0 to G	"	10.0	"		
			279	IN	"	2.7 V	"	"	"	"						"		"	"	"	"	2.7 V	"	A1 to G	"	"	"			
			280	2.7 V	"	"	"	"	"	"						"		"	"	"	"	"	"	A2 to G	"	"	"			
			281	2.7 V	"	"	"	"	"	"						"		"	"	"	IN	"	2.7 V	"	A3 to G	"	"	"		
			282	GND	GND	IN	GND	GND	2.7 V	"						"		"	"	GND	GND	"	2.7 V	"	A0 to G	"	"	"		
			283	IN	"	GND	"	"	"	"						"		"	"	"	"	GND	"	A1 to G	"	"	"			
			284	GND	"	"	"	"	"	"						"		"	"	"	"	IN	"	A2 to G	"	"	"			
			285	"	"	"	"	"	"	"						"		"	"	"	"	GND	"	A3 to G	"	"	"			
			286	"	2.7 V	IN	2.7 V	2.7 V	"	"						"		"	2.7 V	2.7 V	GND	2.7 V	"	"	A0 to G	"	"	"		
			287	IN	"	GND	"	"	"	"						"		"	"	"	"	"	"	"	A1 to G	"	"	"		
			288	GND	"	"	"	"	"	"						"		"	"	"	"	IN	"	A2 to G	"	"	"			
			289	"	"	"	"	"	"	"						"		"	"	"	IN	"	GND	"	A3 to G	"	"	"		
			t _{PLH6}		290	"	GND	GND	IN	"	"	GND	"					"		GND	GND	GND	GND	"	"	"	B0 to G	"	11.5	"
					291	"	IN	"	GND	"	"	"						"		"	"	"	"	"	"	"	B1 to G	"	"	"
	292	"			GND	"	"	"	"	"						"		"	"	"	"	"	"	"	B2 to G	"	"	"		
	293	"			GND	"	"	"	"	"						"		"	"	IN	"	GND	"	"	"	B3 to G	"	"	"	
	294	2.7 V			2.7 V	2.7 V	IN	GND	2.7 V	"						"		"	2.7 V	2.7 V	2.7 V	2.7 V	"	"	"	B0 to G	"	"	"	
	295	"			IN	"	2.7 V	"	"	"						"		"	"	"	"	"	"	"	"	B1 to G	"	"	"	
	296	"			2.7 V	"	"	"	"	"						"		"	"	"	IN	"	"	"	"	B2 to G	"	"	"	
	297	"			2.7 V	"	"	"	"	"						"		"	"	"	"	2.7 V	"	"	"	B3 to G	"	"	"	
	298	"			GND	"	IN	2.7 V	"	"						"		"	GND	"	GND	"	2.7 V	"	"	"	B0 to G	"	"	"
	299	"			IN	"	GND	"	"	"	"					"		"	"	"	"	GND	"	"	"	"	B1 to G	"	"	"
	300	"	GND	"	"	"	"	"	"					"		"	"	"	"	IN	"	"	"	"	B2 to G	"	"	"		
	301	"	GND	"	"	"	"	"	"					"		"	IN	"	GND	"	"	"	"	"	B3 to G	"	"	"		

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{CC}		Min	Max	
9	T _{PHL6}	3003 Fig. 4	302	GND	GND	GND	IN	2.7 V	GND	GND			GND			OUT		GND	GND	GND	GND	GND	5.0 V	B0 to G	3.0	10.0	ns
			303	"	IN	"	GND	"	"	"			"			"		"	"	"	"	"	"	B1 to G	"	"	"
			304	"	GND	"	"	"	"	"			"			"		"	"	"	IN	"	"	B2 to G	"	"	"
			305	"	GND	"	"	"	"	"			"			"		"	"	IN	"	"	"	B3 to G	"	"	"
			306	2.7 V	2.7 V	2.7 V	IN	GND	2.7 V	"			"			"		"	2.7 V	2.7 V	2.7 V	2.7 V	"	B0 to G	"	"	"
			307	"	IN	"	2.7 V	"	"	"			"			"		"	"	"	2.7 V	"	"	B1 to G	"	"	"
			308	"	2.7 V	"	"	"	"	"			"			"		"	"	"	IN	"	"	B2 to G	"	"	"
			309	"	2.7 V	"	"	"	"	"			"			"		"	IN	"	2.7 V	"	"	B3 to G	"	"	"
			310	"	GND	"	IN	2.7 V	"	"			"			"		"	GND	"	GND	"	"	B0 to G	"	"	"
			311	"	IN	"	GND	"	"	"			"			"		"	"	"	GND	"	"	B1 to G	"	"	"
			312	"	GND	"	"	"	"	"			"			"		"	"	"	IN	"	"	B2 to G	"	"	"
			313	"	"	"	"	"	"	"			"			"		"	"	IN	GND	"	"	B3 to G	"	"	"
			314	GND	"	IN	"	"	GND	"			"			OUT		"	GND	GND	"	GND	"	A0 to P	2.0	11.0	"
			315	IN	"	GND	"	"	"	"			"			"		"	"	"	"	"	"	A1 to P	"	"	"
			316	GND	"	"	"	"	"	"			"			"		"	"	"	"	IN	"	A2 to P	"	"	"
			317	GND	"	"	"	"	"	"			"			"		"	"	IN	"	GND	"	A3 to P	"	"	"
			318	2.7 V	2.7 V	IN	2.7 V	GND	2.7 V	"			"			"		"	2.7 V	2.7 V	2.7 V	2.7 V	"	A0 to P	"	"	"
			319	IN	"	2.7 V	"	"	"	"			"			"		"	"	"	"	2.7 V	"	A1 to P	"	"	"
			320	2.7 V	"	"	"	"	"	"			"			"		"	"	"	IN	"	"	A2 to P	"	"	"
			321	"	"	"	"	"	"	"			"			"		"	"	IN	"	2.7 V	"	A3 to P	"	"	"
			322	"	GND	IN	GND	2.7 V	"	"			"			"		"	GND	2.7 V	GND	"	"	A0 to P	"	"	"
			323	IN	"	2.7 V	"	"	"	"			"			"		"	"	"	"	"	"	A1 to P	"	"	"
			324	2.7 V	"	"	"	"	"	"			"			"		"	"	"	"	IN	"	A2 to P	"	"	"
			325	2.7 V	"	"	"	"	"	"			"			"		"	"	IN	"	2.7 V	"	A3 to P	"	"	"
			326	GND	"	IN	"	"	GND	"			"			"		"	"	GND	"	"	"	A0 to P	3.0	9.5	"
			327	IN	"	GND	"	"	"	"			"			"		"	"	"	"	"	"	A1 to P	"	"	"
			328	GND	"	"	"	"	"	"			"			"		"	"	"	"	IN	"	A2 to P	"	"	"
			329	GND	"	"	"	"	"	"			"			"		"	"	IN	"	GND	"	A3 to P	"	"	"
			330	2.7 V	2.7 V	IN	2.7 V	GND	2.7 V	"			"			"		"	2.7 V	2.7 V	2.7 V	2.7 V	"	A0 to P	"	"	"
			331	IN	"	2.7 V	"	"	"	"			"			"		"	"	"	"	2.7 V	"	A1 to P	"	"	"
			332	2.7 V	"	"	"	"	"	"			"			"		"	"	"	"	IN	"	A2 to P	"	"	"
			333	"	"	"	"	"	"	"			"			"		"	"	"	"	GND	"	A3 to P	"	"	"
			334	"	GND	IN	GND	2.7 V	"	"			"			"		"	GND	2.7 V	GND	2.7 V	"	A0 to P	"	"	"
			335	IN	"	2.7 V	"	"	"	"			"			"		"	"	"	"	2.7 V	"	A1 to P	"	"	"
			336	2.7 V	"	"	"	"	"	"			"			"		"	"	"	"	IN	"	A2 to P	"	"	"
			337	2.7 V	"	"	"	"	"	"			"			"		"	"	IN	"	2.7 V	"	A3 to P	"	"	"

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 R, S, 2 method	Cases Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit	
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	$\overline{G}$	$\overline{P}$	Cn	B3	A3	B2	A2	V _{cc}	Min	Max			
9 T _c = 25°C	t _{PUH8}	3003 Fig. 4	338	2.7 V	2.7 V	2.7 V	IN	2.7 V	GND	GND							OUT	2.7 V	2.7 V	2.7 V	2.7 V	2.7 V	5.0 V	$\overline{B0}$ to $\overline{P}$	2.0	11.0	ns	
			339	"	IN	"	2.7 V	"	"	"							"	"	"	"	2.7 V	"	"	B1 to $\overline{P}$	"	"	"	
			340	"	2.7 V	"	"	"	"	"							"	"	"	"	"	IN	"	"	B2 to $\overline{P}$	"	"	"
			341	"	2.7 V	"	"	"	"	"							"	"	"	IN	"	2.7 V	"	"	B3 to $\overline{P}$	"	"	"
			342	GND	GND	GND	IN	GND	2.7 V	"							"	GND	GND	GND	GND	GND	"	"	B0 to $\overline{P}$	"	"	"
			343	"	IN	"	GND	"	"	"							"	"	"	"	"	GND	"	"	B1 to $\overline{P}$	"	"	"
			344	"	GND	"	"	"	"	"							"	"	"	"	"	IN	"	"	B2 to $\overline{P}$	"	"	"
			345	"	GND	"	"	"	"	"							"	"	"	IN	"	GND	"	"	B3 to $\overline{P}$	"	"	"
			346	"	2.7 V	"	IN	2.7 V	"	"							"	"	"	2.7 V	"	2.7 V	"	"	B0 to $\overline{P}$	"	"	"
			347	"	IN	"	2.7 V	"	"	"							"	"	"	"	"	2.7 V	"	"	B1 to $\overline{P}$	"	"	"
			348	"	2.7 V	"	"	"	"	"							"	"	"	"	"	IN	"	"	B2 to $\overline{P}$	"	"	"
			349	"	"	"	"	"	"	"							"	"	"	IN	"	2.7 V	"	"	B3 to $\overline{P}$	"	"	"
	t _{PHL8}	350	2.7 V	"	2.7 V	IN	"	GND	"							"	2.7 V	2.7 V	2.7 V	2.7 V	"	2.7 V	"	B0 to $\overline{P}$	3.0	9.5	"	
		351	"	IN	"	2.7 V	"	"	"							"	"	"	"	"	"	"	"	B1 to $\overline{P}$	"	"	"	
		352	"	2.7 V	"	"	"	"	"							"	"	"	"	"	IN	"	"	B2 to $\overline{P}$	"	"	"	
		353	"	2.7 V	"	"	"	"	"							"	"	"	IN	"	2.7 V	"	"	B3 to $\overline{P}$	"	"	"	
		354	GND	GND	GND	IN	GND	2.7 V	"							"	GND	GND	GND	GND	GND	"	"	B0 to $\overline{P}$	"	"	"	
		355	"	IN	"	GND	"	"	"							"	"	"	"	"	"	"	"	B1 to $\overline{P}$	"	"	"	
		356	"	GND	"	"	"	"	"							"	"	"	"	"	IN	"	"	B2 to $\overline{P}$	"	"	"	
		357	"	GND	"	"	"	"	"							"	"	"	IN	"	GND	"	"	B3 to $\overline{P}$	"	"	"	
		358	"	2.7 V	"	IN	2.7 V	"	"							"	"	"	2.7 V	"	2.7 V	"	"	B0 to $\overline{P}$	"	"	"	
		359	"	IN	"	2.7 V	"	"	"							"	"	"	"	"	2.7 V	"	"	B1 to $\overline{P}$	"	"	"	
		360	"	2.7 V	"	"	"	"	"							"	"	"	"	"	"	"	"	B2 to $\overline{P}$	"	"	"	
		361	"	"	"	"	"	"	"							"	"	"	"	IN	"	2.7 V	"	"	B3 to $\overline{P}$	"	"	"
t _{PUH9}	362	2.7 V	"	2.7 V	2.7 V	IN	2.7 V	GND	"						OUT			GND	2.7 V	2.7 V	2.7 V	2.7 V	"	S0 to $\overline{G}$	"	15.0	"	
	363	2.7 V	"	2.7 V	"	2.7 V	IN	GND	"						"	"		GND	"	2.7 V	"	2.7 V	"	S1 to $\overline{G}$	"	"	"	
	364	GND	"	GND	"	2.7 V	GND	IN	"						"	"		2.7 V	"	GND	"	GND	"	S2 to $\overline{G}$	"	"	"	
	365	2.7 V	"	2.7 V	"	IN	2.7 V	GND	"						"	"		GND	"	2.7 V	"	2.7 V	"	S0 to $\overline{G}$	"	13.5	"	
t _{PHL9}	366	2.7 V	"	2.7 V	"	2.7 V	IN	GND	"						"	"		GND	"	2.7 V	"	2.7 V	"	S1 to $\overline{G}$	"	"	"	
	367	GND	"	GND	"	2.7 V	GND	IN	"						"	"		2.7 V	"	GND	"	GND	"	S2 to $\overline{G}$	"	"	"	
t _{PUH10}	368	GND	"	GND	"	IN	2.7 V	GND	"							OUT		GND	"	GND	"	GND	"	S0 to $\overline{P}$	"	14.0	"	
	369	2.7 V	GND	2.7 V	GND	2.7 V	IN	GND	"						"	"	"	"	GND	2.7 V	GND	2.7 V	"	S1 to $\overline{P}$	"	"	"	
	370	GND	GND	GND	GND	2.7 V	GND	IN	"						"	"	"	"	GND	GND	GND	GND	"	S2 to $\overline{P}$	"	"	"	

See footnotes at end of device type 03.

TABLE III. Group A inspection for device type 03.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	G	P	Cn	B3	A3	B2	A2	V _{cc}		Min	Max	
9	I _{PH} 10 Tc = 25°C	3003	371	GND	2.7 V	GND	2.7 V	IN	2.7 V	GND			GND				OUT	GND	2.7 V	GND	2.7 V	GND	5.0 V	S0 to P	3.0	13.5	ns
		Fig. 4	372	2.7 V	GND	2.7 V	GND	2.7 V	IN	GND			"				"	"	GND	2.7 V	GND	2.7 V	"	S1 to P	"	"	"
		"	373	GND	GND	GND	GND	2.7 V	GND	IN			"				"	"	GND	GND	GND	GND	"	S2 to P	"	"	"
10	Same tests as subgroup 9, except T _C = +125°C and use limits from table I.																										
11	Same tests as subgroup 10, except T _C = -55°C and use limits from table I.																										

1/ I_L limits (mA) min/max values for circuit shown:

Parameter	Test no.	A	B	C
I _{L1}	48 - 50		-0.12/-0.6	-0.12/-0.6
I _{L2}	51 - 59		-0.12/-2.4	-0.12/-2.4

2/ H ≥ 1.5 V, L ≤ 1.5 V ; A = 2.5 V, B = 0.5 V.

3/ Perform function sequence at V_{cc} = 4.5 V and repeat at V_{cc} = 5.5 V.

TABLE III. Group A inspection for device type 04.

See footnotes at end of device type 04.

TABLE III. Group A inspection for device type 04.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits	Unit	
1 Tc = 25°C	I _{HH1}	3009	60	2.7 V	A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	OVR	Cn + 4	Cn	B3	A3	B2	A2	V _{CC} 5.5 V	Min	μA	
			61																								
			62																								
			63																								
			64																								
			65																								
			66																								
			67																								
			68																								
			69																								
			70																								
			71																								
			72	7.0 V																							
			73																								
			74																								
			75																								
2 Tc = 25°C	I _{HH2}		76																								
			77																								
			78																								
			79																								
			80																								
			81																								
			82																								
			83																								
			84	GND	GND	GND	GND	4.5 V	GND	GND	0.0 V																
			85	"	"	"	"	"	"	"	0.0 V																
			86	"	"	"	"	"	"	"	"																
			87	"	"	"	"	"	"	"	"																
			88	"	"	"	"	"	"	"	"																
			89	4.5 V	GND	"	4.5 V	"	"	"	"																
			90	"	"	"	GND	"	4.5 V	4.5 V	2.5 V																
			91	"	"	"	"	"	"	"	"																
92	"	"	"	"	"	"	"	"																			
93	"	"	"	"	"	"	"	"																			
3 Tc = 25°C	I _{OS}		94	"	"	"	"	"	"	"	"	"	"	"													
			95	"	"	"	"	"	"	"	"	"	"	"													
			96	"	"	"	"	"	"	"	"	"	"	"	"												
			Same tests, terminal conditions, and limits as subgroup 1, except T _C = +125°C and V _{IC} tests are omitted.																								
			Same tests, terminal conditions, and limits as subgroup 1, except T _C = -55°C and V _{IC} tests are omitted.																								
			97	B	B	B	B	B	B	B	B	B	L	L	L	GND	L	L	H	H	B	B	B	B	3/	All	
			98	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			99	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			100	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			101	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			102	A	A	A	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			103	B	B	B	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			104	B	A	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			105	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			106	A	A	A	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
			107	B	B	B	B	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
108	B	A	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
109	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
110	A	A	A	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
111	B	B	B	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
112	B	A	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
113	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
114	A	A	A	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
115	B	B	B	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
116	B	A	B	A	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			

See footnotes at end of device type 04.

TABLE III. Group A inspection for device type 04.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit					
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	OVR	Cn + 4	Cn	B3	A3	B2	A2	V _{CC}		Min	Max						
7	Functional tests 2/	3014	117	A	A	A	B	A	A	B	H	H	GND	H	H	L	L	B	B	A	B	A	V _{CC}	All								
			118	A	A	A	B	"	"	"	H	H	"	H	"	"	"	"	H	A	A	A	A	"	"	"						
			119	B	B	B	B	"	"	"	"	"	H	L	"	"	"	"	L	A	B	B	B	"	"	"						
			120	B	A	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	A	B	A	B	"	"	"					
			121	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B	A	A	"	"	"					
			122	A	A	A	A	"	"	"	"	"	"	H	"	"	"	"	"	"	A	A	A	A	"	"	"					
			123	B	B	B	B	B	A	B	A	A	L	L	"	"	"	"	L	B	B	B	B	"	"	"						
			124	B	A	B	A	"	"	"	"	"	"	H	"	"	"	"	"	"	A	B	A	B	"	"	"					
			125	A	B	A	B	"	"	"	"	"	"	H	"	"	"	"	"	"	"	A	B	A	"	"	"					
			126	"	A	"	"	"	"	"	"	"	"	L	"	"	"	"	"	"	"	A	"	"	"	"	"					
			127	"	B	"	B	"	"	"	"	"	"	H	"	"	"	"	"	"	B	"	"	"	"	"	"					
			128	B	B	B	B	A	"	"	"	"	"	L	"	"	"	"	"	"	B	B	B	"	"	"	"					
			129	B	A	B	A	"	"	"	"	"	"	H	"	"	"	"	"	"	A	B	A	B	"	"	"					
			130	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A	B	A	"	"	"					
			131	"	A	"	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A	"	"	"	"	"					
			132	"	A	"	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A	"	"	"	"	"					
			133	B	B	B	B	B	A	"	"	"	"	L	"	"	"	"	"	"	B	B	B	"	"	"	"					
			134	B	A	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A	B	A	"	"	"					
			135	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B	A	A	"	"	"					
			136	"	A	"	A	"	"	"	"	"	"	H	"	"	"	"	"	"	"	A	"	"	"	"	"					
			137	"	A	"	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A	"	"	"	"	"					
			138	B	B	B	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	B	B	B	"	"	"					
			139	B	A	B	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A	B	A	"	"	"					
			140	A	B	A	B	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B	A	A	"	"	"					
			141	"	A	"	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A	A	A	"	"	"					
			142	"	A	"	A	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A	"	A	"	"	"					
8	Same tests, terminal conditions, and limits as for subgroup 7, except T _c = +125°C and T _c = -55°C.																															
9	t _{PH1} Fig. 4	3003	143	GND	GND	GND	GND	2.7 V	GND	GND	OUT	OUT	GND					IN	GND	GND	GND	GND	5.0 V	Cn to F0	3	12	ns					
			144	"	"	"	"	"	"	"	"	"	OUT	"	OUT				"	"	"	"	"	"	Cn to F1	"	"	"				
			145	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	"	"	Cn to F2	"	"	"			
			146	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	"	"	Cn to F3	"	"	"			
			147	"	"	"	"	"	"	GND	2.7 V	"	OUT	OUT	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F0	"	"	"		
			148	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"		
			149	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	"	"	"	Cn to F2	"	"	"		
			150	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	"	"	"		
			151	"	2.7 V	"	2.7 V	2.7 V	"	"	"	"	OUT	OUT	"	"	"	"	"	"	2.7 V	"	2.7 V	"	"	"	Cn to F0	"	"	"		
			152	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"	
			153	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F2	"	"	"	
			154	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	"	"	"	
			155	"	GND	"	GND	"	GND	"	OUT	OUT	OUT	OUT	"	"	OUT			"	GND	"	GND	"	"	"	Cn to F0	2.5	8	"		
			156	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"	
			157	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	"	"	Cn to F2	"	"	"		
			158	"	"	"	"	"	"	"	"	"	"	"	"	"	"	OUT			"	"	"	"	"	"	"	Cn to F3	"	"	"	
			159	"	"	"	"	"	"	GND	2.7 V	"	OUT	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F0	"	"	"	
			160	"	"	"	"	"	"	"	"	"	"	"	OUT	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F1	"	"	"	
			161	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F2	"	"	"
			162	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	"	"	"
			163	"	"	"	"	"	"	"	"	"	"	OUT	OUT	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F0	"	"	"
			164	"	2.7 V	"	2.7 V	2.7 V	"	"	"	"	"	OUT	OUT	"	"	"	"	"	"	2.7 V	"	2.7 V	"	"	"	"	Cn to F1	"	"	"
			165	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F2	"	"	"
			166	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to F3	"	"	"

TABLE III. Group A inspection for device type 04.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits Min	Test limits Max	Unit																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
9 $T_c = 25^\circ\text{C}$	t_{PH2}	3003 Fig. 4	167	A1	2.7 V	IN	A0	2.7 V	B0	2.7 V	S0	2.7 V	GND	S1	GND	S2	GND	F0	OUT	F1	GND	GND	F2	OUT	F3	OUT	F4	OUT	F5	OUT	F6	OUT	F7	OUT	F8	OUT	F9	OUT	F10	OUT	F11	OUT	F12	OUT	F13	OUT	F14	OUT	F15	OUT	F16	OUT	F17	OUT	F18	OUT	F19	OUT	F20	OUT	F21	OUT	F22	OUT	F23	OUT	F24	OUT	F25	OUT	F26	OUT	F27	OUT	F28	OUT	F29	OUT	F30	OUT	F31	OUT	F32	OUT	F33	OUT	F34	OUT	F35	OUT	F36	OUT	F37	OUT	F38	OUT	F39	OUT	F40	OUT	F41	OUT	F42	OUT	F43	OUT	F44	OUT	F45	OUT	F46	OUT	F47	OUT	F48	OUT	F49	OUT	F50	OUT	F51	OUT	F52	OUT	F53	OUT	F54	OUT	F55	OUT	F56	OUT	F57	OUT	F58	OUT	F59	OUT	F60	OUT	F61	OUT	F62	OUT	F63	OUT	F64	OUT	F65	OUT	F66	OUT	F67	OUT	F68	OUT	F69	OUT	F70	OUT	F71	OUT	F72	OUT	F73	OUT	F74	OUT	F75	OUT	F76	OUT	F77	OUT	F78	OUT	F79	OUT	F80	OUT	F81	OUT	F82	OUT	F83	OUT	F84	OUT	F85	OUT	F86	OUT	F87	OUT	F88	OUT	F89	OUT	F90	OUT	F91	OUT	F92	OUT	F93	OUT	F94	OUT	F95	OUT	F96	OUT	F97	OUT	F98	OUT	F99	OUT	F100	OUT	F101	OUT	F102	OUT	F103	OUT	F104	OUT	F105	OUT	F106	OUT	F107	OUT	F108	OUT	F109	OUT	F110	OUT	F111	OUT	F112	OUT	F113	OUT	F114	OUT	F115	OUT	F116	OUT	F117	OUT	F118	OUT	F119	OUT	F120	OUT	F121	OUT	F122	OUT	F123	OUT	F124	OUT	F125	OUT	F126	OUT	F127	OUT	F128	OUT	F129	OUT	F130	OUT	F131	OUT	F132	OUT	F133	OUT	F134	OUT	F135	OUT	F136	OUT	F137	OUT	F138	OUT	F139	OUT	F140	OUT	F141	OUT	F142	OUT	F143	OUT	F144	OUT	F145	OUT	F146	OUT	F147	OUT	F148	OUT	F149	OUT	F150	OUT	F151	OUT	F152	OUT	F153	OUT	F154	OUT	F155	OUT	F156	OUT	F157	OUT	F158	OUT	F159	OUT	F160	OUT	F161	OUT	F162	OUT	F163	OUT	F164	OUT	F165	OUT	F166	OUT	F167	OUT	F168	OUT	F169	OUT	F170	OUT	F171	OUT	F172	OUT	F173	OUT	F174	OUT	F175	OUT	F176	OUT	F177	OUT	F178	OUT	F179	OUT	F180	OUT	F181	OUT	F182	OUT	F183	OUT	F184	OUT	F185	OUT	F186	OUT	F187	OUT	F188	OUT	F189	OUT	F190	OUT	F191	OUT	F192	OUT	F193	OUT	F194	OUT	F195	OUT	F196	OUT	F197	OUT	F198	OUT	F199	OUT	F200	OUT	F201	OUT	F202	OUT	F203	OUT	F204	OUT	F205	OUT	F206	OUT	F207	OUT	F208	OUT	F209	OUT	F210	OUT	F211	OUT	F212	OUT	F213	OUT	F214	OUT	F215	OUT	F216	OUT	F217	OUT	F218	OUT	F219	OUT	F220	OUT	F221	OUT	F222	OUT	F223	OUT	F224	OUT	F225	OUT	F226	OUT	F227	OUT	F228	OUT	F229	OUT	F230	OUT	F231	OUT	F232	OUT	F233	OUT	F234	OUT	F235	OUT	F236	OUT	F237	OUT	F238	OUT	F239	OUT	F240	OUT	F241	OUT	F242	OUT	F243	OUT	F244	OUT	F245	OUT	F246	OUT	F247	OUT	F248	OUT	F249	OUT	F250	OUT	F251	OUT	F252	OUT	F253	OUT	F254	OUT	F255	OUT	F256	OUT	F257	OUT	F258	OUT	F259	OUT	F260	OUT	F261	OUT	F262	OUT	F263	OUT	F264	OUT	F265	OUT	F266	OUT	F267	OUT	F268	OUT	F269	OUT	F270	OUT	F271	OUT	F272	OUT	F273	OUT	F274	OUT	F275	OUT	F276	OUT	F277	OUT	F278	OUT	F279	OUT	F280	OUT	F281	OUT	F282	OUT	F283	OUT	F284	OUT	F285	OUT	F286	OUT	F287	OUT	F288	OUT	F289	OUT	F290	OUT	F291	OUT	F292	OUT	F293	OUT	F294	OUT	F295	OUT	F296	OUT	F297	OUT	F298	OUT	F299	OUT	F300	OUT	F301	OUT	F302	OUT	F303	OUT	F304	OUT	F305	OUT	F306	OUT	F307	OUT	F308	OUT	F309	OUT	F310	OUT	F311	OUT	F312	OUT	F313	OUT	F314	OUT	F315	OUT	F316	OUT	F317	OUT	F318	OUT	F319	OUT	F320	OUT	F321	OUT	F322	OUT	F323	OUT	F324	OUT	F325	OUT	F326	OUT	F327	OUT	F328	OUT	F329	OUT	F330	OUT	F331	OUT	F332	OUT	F333	OUT	F334	OUT	F335	OUT	F336	OUT	F337	OUT	F338	OUT	F339	OUT	F340	OUT	F341	OUT	F342	OUT	F343	OUT	F344	OUT	F345	OUT	F346	OUT	F347	OUT	F348	OUT	F349	OUT	F350	OUT	F351	OUT	F352	OUT	F353	OUT	F354	OUT	F355	OUT	F356	OUT	F357	OUT	F358	OUT	F359	OUT	F360	OUT	F361	OUT	F362	OUT	F363	OUT	F364	OUT	F365	OUT	F366	OUT	F367	OUT	F368	OUT	F369	OUT	F370	OUT	F371	OUT	F372	OUT	F373	OUT	F374	OUT	F375	OUT	F376	OUT	F377	OUT	F378	OUT	F379	OUT	F380	OUT	F381	OUT	F382	OUT	F383	OUT	F384	OUT	F385	OUT	F386	OUT	F387	OUT	F388	OUT	F389	OUT	F390	OUT	F391	OUT	F392	OUT	F393	OUT	F394	OUT	F395	OUT	F396	OUT	F397	OUT	F398	OUT	F399	OUT	F400	OUT	F401	OUT	F402	OUT	F403	OUT	F404	OUT	F405	OUT	F406	OUT	F407	OUT	F408	OUT	F409	OUT	F410	OUT	F411	OUT	F412	OUT	F413	OUT	F414	OUT	F415	OUT	F416	OUT	F417	OUT	F418	OUT	F419	OUT	F420	OUT	F421	OUT	F422	OUT	F423	OUT	F424	OUT	F425	OUT	F426	OUT	F427	OUT	F428	OUT	F429	OUT	F430	OUT	F431	OUT	F432	OUT	F433	OUT	F434	OUT	F435	OUT	F436	OUT	F437	OUT	F438	OUT	F439	OUT	F440	OUT	F441	OUT	F442	OUT	F443	OUT	F444	OUT	F445	OUT	F446	OUT	F447	OUT	F448	OUT	F449	OUT	F450	OUT	F451	OUT	F452	OUT	F453	OUT	F454	OUT	F455	OUT	F456	OUT	F457	OUT	F458	OUT	F459	OUT	F460	OUT	F461	OUT	F462	OUT	F463	OUT	F464	OUT	F465	OUT	F466	OUT	F467	OUT	F468	OUT	F469	OUT	F470	OUT	F471	OUT	F472	OUT	F473	OUT	F474	OUT	F475	OUT	F476	OUT	F477	OUT	F478	OUT	F479	OUT	F480	OUT	F481	OUT	F482	OUT	F483	OUT	F484	OUT	F485	OUT	F486	OUT	F487	OUT	F488	OUT	F489	OUT	F490	OUT	F491	OUT	F492	OUT	F493	OUT	F494	OUT	F495	OUT	F496	OUT	F497	OUT	F498	OUT	F499	OUT	F500	OUT	F501	OUT	F502	OUT	F503	OUT	F504	OUT	F505	OUT	F506	OUT	F507	OUT	F508	OUT	F509	OUT	F510	OUT	F511	OUT	F512	OUT	F513	OUT	F514	OUT	F515	OUT	F516	OUT	F517	OUT	F518	OUT	F519	OUT	F520	OUT	F521	OUT	F522	OUT	F523	OUT	F524	OUT	F525	OUT	F526	OUT	F527	OUT	F528	OUT	F529	OUT	F530	OUT	F531	OUT	F532	OUT	F533	OUT	F534	OUT	F535	OUT	F536	OUT	F537	OUT	F538	OUT	F539	OUT	F540	OUT	F541	OUT	F542	OUT	F543	OUT	F544	OUT	F545	OUT	F546	OUT	F547	OUT	F548	OUT	F549	OUT	F550	OUT	F551	OUT	F552	OUT	F553	OUT	F554	OUT	F555	OUT	F556	OUT	F557	OUT	F558	OUT	F559	OUT	F560	OUT	F561	OUT	F562	OUT	F563	OUT	F564	OUT	F565	OUT	F566	OUT	F567	OUT	F568	OUT	F569	OUT	F570	OUT	F571	OUT	F572	OUT	F573	OUT	F574	OUT	F575	OUT	F576	OUT	F577	OUT	F578	OUT	F579	OUT	F580	OUT	F581	OUT	F582	OUT	F583	OUT	F584	OUT	F585	OUT	F586	OUT	F587	OUT	F588	OUT	F589	OUT	F590	OUT	F591	OUT	F592	OUT	F593	OUT	F594	OUT	F595	OUT	F596	OUT	F597	OUT	F598	OUT	F599	OUT	F600	OUT	F601	OUT	F602	OUT	F603	OUT	F604	OUT	F605	OUT	F606	OUT	F607	OUT	F608	OUT	F609	OUT	F610	OUT	F611	OUT	F612	OUT	F613	OUT	F614	OUT	F615	OUT	F616	OUT	F617	OUT	F618	OUT	F619	OUT	F620	OUT	F621	OUT	F622	OUT	F623	OUT	F624	OUT	F625	OUT	F626	OUT	F627	OUT	F628	OUT	F629	OUT	F630	OUT	F631	OUT	F632	OUT	F633	OUT	F634	OUT	F635	OUT	F636	OUT	F637	OUT	F638	OUT	F639	OUT	F640	OUT	F641	OUT	F642	OUT	F643	OUT	F644	OUT	F645	OUT	F646	OUT	F647	OUT	F648	OUT	F649	OUT	F650	OUT	F651	OUT	F652	OUT	F653	OUT	F654	OUT	F655	OUT	F656	OUT	F657	OUT	F658	OUT	F659	OUT	F660	OUT	F661	OUT	F662	OUT	F663	OUT	F664	OUT	F665	OUT	F666	OUT	F667	OUT	F668	OUT	F669	OUT	F670	OUT	F671	OUT	F672	OUT	F673	OUT	F674	OUT	F675	OUT	F676	OUT	F677	OUT	F678	OUT	F679	OUT	F680	OUT	F681	OUT	F682	OUT	F683	OUT	F684	OUT	F685	OUT	F686	OUT	F687	OUT	F688	OUT	F689	OUT	F690	OUT	F691	OUT	F692	OUT	F693	OUT	F694	OUT	F695	OUT	F696	OUT	F697	OUT	F698	OUT	F699	OUT	F700	OUT	F701	OUT	F702	OUT	F703	OUT	F704	OUT	F705	OUT	F706	OUT	F707	OUT	F708	OUT	F709	OUT	F710	OUT	F711	OUT	F712	OUT	F713	OUT	F714	OUT	F715	OUT	F716	OUT	F717	OUT	F718	OUT	F719	OUT	F720	OUT	F721	OUT	F722	OUT	F723	OUT	F724	OUT	F725	OUT	F726	OUT	F727	OUT	F728	OUT	F729	OUT	F730	OUT	F731	OUT	F732	OUT	F733	OUT	F734	OUT	F735	OUT	F736	OUT	F737	OUT	F738	OUT	F739	OUT	F740	OUT	F741	OUT	F742	OUT	F743	OUT	F744	OUT	F745	OUT	F746	OUT	F747	OUT	F748	OUT	F749	OUT	F750	OUT	F751	OUT	F752	OUT	F753	OUT	F754	OUT	F755	OUT	F756	OUT	F757	OUT	F758	OUT	F759	OUT	F760	OUT	F761	OUT	F762	OUT	F763	OUT	F764	OUT	F765	OUT	F766	OUT	F767	OUT	F768	OUT	F769	OUT	F770	OUT	F771	OUT	F772	OUT	F773	OUT	F774	OUT	F775	OUT	F776	OUT	F777	OUT	F778	OUT	F779	OUT	F780	OUT	F781	OUT	F782	OUT	F783	OUT	F784	OUT	F785	OUT	F786	OUT	F787	OUT	F788	OUT	F789	OUT	F790	OUT	F791	OUT	F792	OUT	F793	OUT	F794	OUT	F795	OUT	F796	OUT	F797	OUT	F798	OUT	F799	OUT	F800	OUT	F801	OUT	F802	OUT	F803	OUT	F804	OUT	F805	OUT	F806	OUT	F807	OUT	F808	OUT	F809	OUT	F810	OUT	F811	OUT	F812	OUT	F813	OUT	F814	OUT	F815	OUT	F816	OUT	F817	OUT	F818	OUT	F819	OUT	F820	OUT	F821	OUT	F822	OUT	F823	OUT	F824	OUT	F825	OUT	F826	OUT	F827	OUT	F828	OUT	F829	OUT	F830	OUT	F831	OUT	F832	OUT	F833	OUT	F834	OUT	F835	OUT	F836	OUT	F837	OUT	F838	OUT	F839	OUT	F840	OUT	F841	OUT	F842	OUT	F843	OUT	F844	OUT	F845	OUT	F846	OUT	F847	OUT	F848	OUT	F849	OUT	F850	OUT	F851	OUT

TABLE III. Group A inspection for device type 04.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit				
																									Min	Max					
9 Tc = 25°C	tPHL3	3003 Fig. 4	223	2.7 V	A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	OVR	Cn + 4	Cn	B3	A3	B2	A2	Vcc	B0 to F0	3.5	12.5	ns			
			224	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"			
			225	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"		
			226	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to F3	"	"	"		
			227	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B0 to F0	"	"	"		
			228	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"		
			229	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"		
			230	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to F3	"	"	"		
			231	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B0 to F0	"	"	"		
			232	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"		
			233	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"		
			234	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to F3	"	"	"		
			235	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B0 to F0	"	"	"		
			236	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"		
			237	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"		
			238	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to F3	"	"	"		
			239	GND	GND	GND	GND	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B0 to F0	"	"	"	
			240	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"	
			241	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"	
			242	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to F3	"	"	"	
			243	2.7 V	"	"	2.7 V	IN	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	B0 to F0	"	"	"
			244	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to F1	"	"	"	
			245	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to F2	"	"	"	
			246	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to F3	"	"	"	
tPHL4	247	GND	GND	GND	GND	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F0	4	20	"			
	248	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F1	"	"	"			
	249	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F2	"	"	"			
	250	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F3	"	"	"			
	251	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F0	"	"	"			
	252	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F1	"	"	"			
	253	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F2	"	"	"			
	254	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F3	"	"	"			
	255	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F0	"	"	"			
	256	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F1	"	"	"			
tPHL4	257	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F2	"	"	"			
	258	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F3	"	"	"			
	259	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F0	"	14	"			
	260	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F1	"	"	"			
	261	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F2	"	"	"			
	262	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S0 to F3	"	"	"			
	263	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F0	"	"	"			
	264	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F1	"	"	"			
	265	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F2	"	"	"			
	266	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to F3	"	"	"			
tPHL5	267	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F0	"	"	"			
	268	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F1	"	"	"			
	269	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F2	"	"	"			
	270	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S2 to F3	"	"	"			
	271	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A0 to OVR	6	15.5	"			
	272	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A1 to OVR	"	"	"			
	273	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A2 to OVR	"	"	"			
	274	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A3 to OVR	"	"	"			
	275	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A0 to OVR	"	"	"			
	276	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A1 to OVR	"	"	"			
277	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A2 to OVR	"	"	"				
278	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A3 to OVR	"	"	"				
279	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A0 to OVR	"	"	"				
280	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A1 to OVR	"	"	"				
281	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A2 to OVR	"	"	"				
282	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A3 to OVR	"	"	"				

See footnotes at end of device type 04.

TABLE III. Group A inspection for device type 04.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits Min	Test limits Max	Unit
9 Tc = 25°C	t _{PHL5}	3003 Fig. 4	283	2.7 V	IN	2.7 V	IN	GND	GND	2.7 V	F0	F1	GND	F2	F3	OVR	Cn + 4	Cn	B3	A3	B2	A2	V _{cc}	A0 to OVR	5	12.5	ns
			284	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	A1 to OVR	"	"	"
			285	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	A2 to OVR	"	"	"
			286	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	A3 to OVR	"	"	"
			287	"	2.7 V	IN	2.7 V	2.7 V	"	"	"	"	"	"	"	"	"	"	"	2.7 V	2.7 V	2.7 V	"	A0 to OVR	"	"	"
			288	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A1 to OVR	"	"	"
			289	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	A2 to OVR	"	"	"
			290	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	A3 to OVR	"	"	"
			291	"	"	IN	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A0 to OVR	"	"	"
			292	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A1 to OVR	"	"	"
			293	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	A2 to OVR	"	"	"
			294	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	A3 to OVR	"	"	"
			295	"	GND	"	IN	GND	GND	"	"	"	"	"	"	"	"	GND	"	GND	GND	GND	"	B0 to OVR	6	15.5	"
			296	"	IN	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to OVR	"	"	"
			297	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to OVR	"	"	"
			298	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to OVR	"	"	"
			299	"	2.7 V	"	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	2.7 V	2.7 V	"	"	"	B0 to OVR	"	"	"
			300	"	"	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to OVR	"	"	"
			301	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to OVR	"	"	"
			302	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to OVR	"	"	"
			303	"	"	"	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	B0 to OVR	"	"	"
			304	"	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to OVR	"	"	"
			305	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to OVR	"	"	"
			306	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to OVR	"	"	"
			307	"	GND	"	IN	GND	GND	"	"	"	"	"	"	"	"	GND	"	IN	2.7 V	2.7 V	"	B0 to OVR	5	12.5	"
			308	"	IN	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to OVR	"	"	"
			309	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to OVR	"	"	"
			310	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to OVR	"	"	"
			311	"	2.7 V	"	IN	2.7 V	"	"	"	"	"	"	"	"	"	2.7 V	"	2.7 V	"	"	"	B0 to OVR	"	"	"
			312	"	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to OVR	"	"	"
			313	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to OVR	"	"	"
			314	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to OVR	"	"	"
			315	"	"	"	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	B0 to OVR	"	"	"
			316	"	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to OVR	"	"	"
			317	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to OVR	"	"	"
			318	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B3 to OVR	"	"	"
			319	GND	GND	IN	GND	"	GND	GND	"	"	"	"	"	"	"	OUT	"	"	"	"	"	A0 to Cn + 4	3.5	9.5	"
			320	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A1 to Cn + 4	"	"	"
			321	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A2 to Cn + 4	"	"	"
			322	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A3 to Cn + 4	"	"	"
			323	2.7 V	2.7 V	IN	2.7 V	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	2.7 V	2.7 V	2.7 V	"	A0 to Cn + 4	"	"	"
			324	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A1 to Cn + 4	"	"	"
			325	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A2 to Cn + 4	"	"	"
			326	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A3 to Cn + 4	"	"	"
			327	GND	"	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	GND	"	"	"	"	"	A0 to Cn + 4	"	"	"
			328	IN	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A1 to Cn + 4	"	"	"
			329	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A2 to Cn + 4	"	"	"
			330	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A3 to Cn + 4	"	"	"
			331	"	GND	IN	GND	"	GND	"	"	"	"	"	"	"	"	"	2.7 V	GND	GND	GND	"	A0 to Cn + 4	"	12.0	"
			332	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A1 to Cn + 4	"	"	"
			333	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A2 to Cn + 4	"	"	"
			334	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A3 to Cn + 4	"	"	"
			335	2.7 V	2.7 V	IN	2.7 V	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	2.7 V	2.7 V	2.7 V	"	A0 to Cn + 4	"	"	"
			336	IN	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A1 to Cn + 4	"	"	"
			337	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A2 to Cn + 4	"	"	"
			338	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A3 to Cn + 4	"	"	"
			339	GND	"	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	GND	"	"	"	"	"	A0 to Cn + 4	"	"	"
			340	IN	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A1 to Cn + 4	"	"	"
			341	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A2 to Cn + 4	"	"	"
			342	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	A3 to Cn + 4	"	"	"

See footnotes at end of device type 04.

TABLE III. Group A inspection for device type 04.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

Subgroup	Symbol	MIL-STD-883 method	Cases R, S, 2 Test no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Measured terminal	Test limits		Unit					
				A1	B1	A0	B0	S0	S1	S2	F0	F1	GND	F2	F3	OVR	Cn + 4	Cn	B3	A3	B2	A2	V _{cc}	B0 to Cn + 4	Min	Max						
9 T _C = 25°C	t _{PH8}	3003 Fig. 4	343	GND	IN	GND	IN	2.7 V	GND	GND	IN	GND	GND	GND	GND		OUT		GND	GND	GND	GND	5.0 V	B0 to Cn + 4	3.5	9.5	ns					
			344	IN	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to Cn + 4	"	"	"				
			345	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B2 to Cn + 4	"	"	"			
			346	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	"	"	B3 to Cn + 4	"	"	"			
			347	2.7 V	2.7 V	2.7 V	IN	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	2.7 V	2.7 V	2.7 V	"	"	B0 to Cn + 4	"	"	"			
			348	"	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	B1 to Cn + 4	"	"	"		
			349	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	"	"	B2 to Cn + 4	"	"	"		
			350	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	2.7 V	"	"	"	B3 to Cn + 4	"	"	"		
			351	"	GND	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	GND	"	"	"	"	"	B0 to Cn + 4	"	"	"		
			352	"	IN	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GND	"	"	"	"	B1 to Cn + 4	"	"	"	
			353	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	"	"	B2 to Cn + 4	"	"	"	
			354	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	GND	"	"	"	"	B3 to Cn + 4	"	"	"	
			355	GND	"	"	GND	IN	"	GND	"	"	"	"	"	"	"	"	"	"	GND	GND	GND	"	"	"	"	B0 to Cn + 4	"	12.0	"	
			356	"	IN	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	B1 to Cn + 4	"	"	"	
			357	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	"	"	B2 to Cn + 4	"	"	"	
			358	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	GND	"	"	"	"	"	B3 to Cn + 4	"	"	"
			359	2.7 V	2.7 V	2.7 V	IN	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	2.7 V	2.7 V	2.7 V	"	"	"	"	"	B0 to Cn + 4	"	"	"
			360	"	IN	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	B1 to Cn + 4	"	"	"
			361	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	"	"	"	B2 to Cn + 4	"	"	"
			362	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	B3 to Cn + 4	"	"	"
363	"	GND	"	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	GND	"	"	"	"	"	B0 to Cn + 4	"	"	"		
364	"	IN	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GND	"	"	"	"	"	B1 to Cn + 4	"	"	"		
365	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	IN	"	"	"	"	"	B2 to Cn + 4	"	"	"		
366	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GND	"	"	"	"	"	B3 to Cn + 4	"	"	"		
t _{PH9}			367	2.7 V	2.7 V	2.7 V	2.7 V	IN	GND	2.7 V	"	"	"	"	"	"	OUT	"	GND	2.7 V	2.7 V	2.7 V	"	"	"	"	S0 to OVR	5.0	16.5	"		
			368	GND	"	GND	"	GND	IN	GND	"	"	"	"	"	"	"	"	"	2.7 V	"	GND	"	"	"	"	"	S1 to OVR	"	"	"	
			369	GND	"	"	"	"	GND	GND	IN	"	"	"	"	"	"	"	"	"	"	GND	"	"	"	"	"	"	S2 to OVR	"	"	"
			370	2.7 V	"	"	"	IN	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	"	"	S0 to OVR	"	17.0	"
			371	GND	"	GND	"	GND	IN	GND	"	"	"	"	"	"	"	"	"	"	"	GND	"	"	"	"	"	"	S1 to OVR	"	"	"
			372	GND	"	"	"	"	GND	GND	IN	"	"	"	"	"	"	"	"	"	"	GND	"	"	"	"	"	"	S2 to OVR	"	"	"
			373	2.7 V	"	2.7 V	"	IN	2.7 V	GND	"	"	"	"	"	"	"	"	OUT	"	"	2.7 V	"	"	"	"	"	"	S0 to Cn + 4	6.5	16.5	"
			374	GND	"	"	"	"	GND	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	S1 to Cn + 4	"	"	"
			375	2.7 V	GND	2.7 V	GND	2.7 V	GND	IN	GND	"	"	"	"	"	"	"	"	"	GND	GND	GND	"	"	"	"	"	S2 to Cn + 4	"	"	"
			376	2.7 V	2.7 V	2.7 V	2.7 V	IN	2.7 V	"	"	"	"	"	"	"	"	"	"	"	GND	2.7 V	2.7 V	2.7 V	"	"	"	"	S0 to Cn + 4	5.0	16.0	"
t _{PH10}			377	GND	2.7 V	GND	2.7 V	GND	IN	GND	"	"	"	"	"	"	"	"	"	2.7 V	GND	2.7 V	"	"	"	"	"	S1 to Cn + 4	"	"	"	
			378	2.7 V	GND	2.7 V	GND	GND	IN	"	"	"	"	"	"	"	"	"	"	GND	GND	2.7 V	"	"	"	"	"	S2 to Cn + 4	"	"	"	
			379	GND	GND	GND	GND	2.7 V	GND	"	"	"	"	"	"	"	"	"	"	"	"	GND	"	"	"	"	"	Cn to Cn + 4	2.0	8.0	"	
			380	"	GND	"	"	GND	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to Cn + 4	"	"	"	
			381	"	2.7 V	"	2.7 V	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	"	"	Cn to Cn + 4	"	"	"	
			382	2.7 V	GND	2.7 V	GND	GND	"	"	"	"	"	"	"	"	"	"	"	"	GND	2.7 V	"	"	"	"	"	Cn to Cn + 4	"	"	"	
			383	"	"	2.7 V	"	GND	GND	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	"	Cn to Cn + 4	"	"	"	
			384	"	"	"	"	"	"	2.7 V	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to Cn + 4	"	"	"	
			385	"	"	"	"	"	"	2.7 V	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to Cn + 4	"	"	"	
			386	GND	GND	GND	GND	2.7 V	GND	GND	"	"	"	"	"	"	"	"	"	"	GND	GND	GND	"	"	"	"	"	Cn to Cn + 4	"	9.0	"
t _{PH11}			387	"	GND	"	"	GND	GND	2.7 V	"	"	"	"	"	"	"	"	"	GND	"	"	"	"	"	"	"	Cn to Cn + 4	"	"	"	
			388	"	2.7 V	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	"	"	Cn to Cn + 4	"	"	"	
			389	2.7 V	GND	2.7 V	GND	GND	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	GND	2.7 V	2.7 V	"	"	"	"	Cn to Cn + 4	"	"	"	
			390	"	2.7 V	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	"	Cn to Cn + 4	"	"	"	
			391	"	"	"	"	"	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to Cn + 4	"	"	"	
			392	"	"	"	"	"	2.7 V	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to Cn + 4	"	"	"	
			393	"	GND	"	"	GND	GND	"	"	"	"	"	"	"	"	"	"	"	GND	"	"	"	"	"	"	Cn to OVR	3.0	11.0	"	
			394	"	2.7 V	"	"	2.7 V	GND	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	"	Cn to OVR	"	"	"	
			395	"	"	"	"	"	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to OVR	"	"	"	
			396	"	"	"	"	"	2.7 V	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to OVR	"	"	"	
t _{PH12}			397	"	GND	"	"	GND	GND	"	"	"	"	"	"	"	"	"	GND	"	"	"	"	"	"	"	Cn to OVR	2.5	10.0	"		
			398	"	2.7 V	"	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	2.7 V	"	"	"	"	"	Cn to OVR	"	"	"		
			399	"	"	"	"	GND	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to OVR	"	"	"		
			400	"	"	"	"	"	2.7 V	2.7 V	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	Cn to OVR	"	"	"		
10	Same tests as subgroup 9, except T _C = +125°C and use limits from table 1.																															
11	Same tests as subgroup 9, except T _C = -55°C and use limits from table 1.																															

See footnotes at end of device type 04.

TABLE III. Group A inspection for device type 04.
Terminal conditions (pins not designated may be high ≥ 2.0 V; low ≤ 0.8 V; or open).

1/ I_{IL} limits (mA) min/max values for circuit shown:

Parameter	Test no.	A	B	C
I_{IL1}	48 - 50		-0.12/-0.6	
I_{IL2}	51 - 59		-0.12/-2.4	

2/ $H \geq 1.5$ V; $L \leq 1.5$ V; A = 2.5 V; B = 0.5 V.
3/ Perform function sequence at $V_{CC} = 4.5$ V and repeat at $V_{CC} = 5.5$ V.

5. PACKAGING

5.1 Packaging requirements. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of materiel is to be performed by DoD or in-house contractor personnel, these personnel need to contact the responsible packaging activity to ascertain packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Service or Defense Agency, or within the military service's system command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

6.1 Intended use. Microcircuits conforming to this specification are intended for original equipment design applications and logistic support of existing equipment.

6.2 Acquisition requirements. Acquisition documents should specify the following:

a. Title, number, and date of the specification.

- b. PIN and compliance identifier, if applicable (see 1.2).
- c. Requirements for delivery of one copy of the conformance inspection data pertinent to the device inspection lot to be supplied with each shipment by the device manufacturer, if applicable.
- d. Requirements for certificate of compliance, if applicable.
- e. Requirements for notification of change of product or process to contracting activity in addition to notification to the qualifying activity, if applicable.
- f. Requirements for failure analysis (including required test condition of method 5003 of MIL-STD-883), corrective action, and reporting of results, if applicable.
- g. Requirements for product assurance options.
- h. Requirements for special carriers, lead lengths, or lead forming, if applicable. These requirements should not affect the part number. Unless otherwise specified, these requirements will not apply to direct purchase by or direct shipment to the Government.
- i. Requirements for "JAN" marking.
- j. Packaging requirements (see 5.1).

6.3 Superseding information. The requirements of MIL-M-38510 have been superseded to take advantage of the available Qualified Manufacturer Listing (QML) system provided by MIL-PRF-38535. Previous references to MIL-M-38510 in this document have been replaced by appropriate references to MIL-PRF-38535. All technical requirements now consist of this specification and MIL-PRF-38535. The MIL-M-38510 specification sheet number and PIN have been retained to avoid adversely impacting existing government logistics systems and contractor's parts lists.

6.4 Qualification. With respect to products requiring qualification, awards will be made only for products which are, at the time of award of contract, qualified for inclusion in Qualified Manufacturers List QML-38535 whether or not such products have actually been so listed by that date. The attention of the contractors is called to these requirements, and manufacturers are urged to arrange to have the products that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts or purchase orders for the products covered by this specification. Information pertaining to qualification of products may be obtained from DSCC-VQ, 3990 E. Broad Street, Columbus, Ohio 43123-1199.

6.5 Abbreviations, symbols, and definitions. The abbreviations, symbols, and definitions used herein are defined in MIL-PRF-38535, MIL-HDBK-1331, and as follows:

GND Ground zero voltage potential
 I_{IN} Current flowing into an input terminal
 V_{IN} Voltage level at an input terminal

6.6 Logistic support. Lead materials and finishes (see 3.4) are interchangeable. Unless otherwise specified, microcircuits acquired for Government logistic support will be acquired to device class B (see 1.2.2), lead material and finish A (see 3.4). Longer length leads and lead forming should not affect the part number.

6.7 Substitutability. The cross-reference information below is presented for the convenience of users. Microcircuits covered by this specification will functionally replace the listed generic-industry type. Generic-industry microcircuit types may not have equivalent operational performance characteristics across military temperature ranges or reliability factors equivalent to MIL-M-35810 device types and may have slight physical variations in relation to case size. The presence of this information should not be deemed as permitting substitution of generic-industry types for MIL-M-38510 types or as a waiver of any of the provisions of MIL-PRF-38535.

Military device type	Generic-industry type
01	54F181
02	54F182
03	54F381
04	54F382

6.8 Manufacturers' designation. Manufacturers' circuits which form a part of this specification are designated with an "X" as shown in table IV herein.

TABLE IV. Manufacturers' designations.

Device type	Manufacturer's designation		
	Circuit A	Circuit B	Circuit C
	National Semiconductor/ Fairchild Semiconductor	Motorola Inc.	Signetics Corp.
01	X	X	X
02	X	X	
03		X	X
04		X	

6.9 Changes from previous issue. Asterisks are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

CONCLUDING MATERIAL

Custodians:

Army - CR
Navy - EC
Air Force - 11
DLA - CC

Preparing activity:
DLA - CC

(Project 5962-2014)

Review activities:

Army - MI, SM
Navy - AS, CG, MC, SH, TD
Air Force - 03, 19, 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at www.dodssp.daps.mil.