

2N2060 JAN, JTX, JTXV

2N2060L JAN, JTX, JTXV

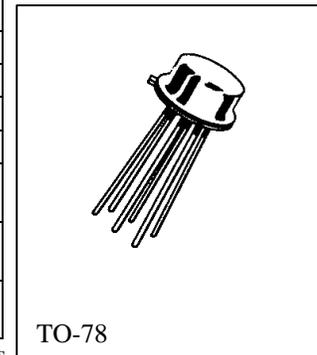


Processed per MIL-PRF-19500/270

UNITIZED DUAL NPN SILICON TRANSISTORS

MAXIMUM RATINGS

Ratings	Symbol	2N2060		Units
Collector-Emitter Voltage	V_{CEO}	60		Vdc
Collector-Base Voltage	V_{CBO}	100		Vdc
Emitter-Base Voltage	V_{EBO}	7.0		Vdc
Collector Current	I_C	500		mAdc
		One Section	Both Sections	
Total Power Dissipation @ $T_A = 25^{\circ}\text{C}$ ⁽¹⁾ @ $T_C = 25^{\circ}\text{C}$ ⁽²⁾	P_T	540	600	mW
		1.5	2.12	W
Operating & Storage Junction Temperature Range	T_J, T_{stg}	-65 to +200		$^{\circ}\text{C}$



- 1) Derate linearly 3.08 mW/ $^{\circ}\text{C}$ for $T_A > 25^{\circ}\text{C}$ for one section, 3.48 mW/ $^{\circ}\text{C}$ for both sections
 2) Derate linearly 8.6 mW/ $^{\circ}\text{C}$ for $T_C > 25^{\circ}\text{C}$ for one section, 12.1 mW/ $^{\circ}\text{C}$ for both sections

ELECTRICAL CHARACTERISTICS ($T_A = 25^{\circ}\text{C}$ unless otherwise noted)

Characteristics	Symbol	Min.	Max.	Unit
OFF CHARACTERISTICS				
Collector-Base Breakdown Voltage ⁽³⁾ $I_C = 100 \mu\text{Adc}$	$V_{(BR)CBO}$	100		Vdc
Collector-Emitter Breakdown Voltage ⁽³⁾ $R_{BE} \leq 10 \Omega, I_C = 10 \text{ mAdc}$	$V_{(BR)CER}$	80		Vdc
Collector-Emitter Breakdown Voltage $I_C = 30 \text{ mAdc}$	$V_{(BR)CEO}$	60		Vdc
Emitter-Base Breakdown Voltage $I_E = 100 \mu\text{Adc}$	$V_{(BR)EBO}$	7.0		Vdc
Collector-Base Cutoff Current $V_{CB} = 80 \text{ Vdc}$	I_{CBO}		2.0	ηAdc
Emitter-Base Cutoff Current $V_{EB} = 5.0 \text{ Vdc}$	I_{EBO}		2.0	ηAdc

2N2060, 2N2060L JAN SERIES

ELECTRICAL CHARACTERISTICS (con't)

Characteristics	Symbol	Min.	Max.	Unit
ON CHARACTERISTICS ⁽³⁾				
Forward-Current Transfer Ratio I _C = 10 μAdc, V _{CE} = 5.0 Vdc I _C = 100 μAdc, V _{CE} = 5.0 Vdc I _C = 1.0 mAdc, V _{CE} = 5.0 Vdc I _C = 10 mAdc, V _{CE} = 5.0 Vdc	h _{FE}	25 30 40 50	75 90 120 150	
Collector-Emitter Saturation Voltage I _C = 50 mAdc, I _B = 5.0 mAdc	V _{CE(sat)}		0.3	Vdc
Base-Emitter Saturation Voltage I _C = 50 mAdc, I _B = 5.0 mVdc	V _{BE(sat)}		0.9	Vdc
DYNAMIC CHARACTERISTICS				
Small-Signal Short-Circuit Forward-Current Transfer Ratio I _C = 1.0 mAdc, V _{CE} = 5.0Vdc, f = 1.0 kHz	h _{fe}	50	150	
Input Capacitance V _{EB} = 0.5 Vdc, I _C = 0, 100 kHz ≤ f ≤ 1.0 MHz	C _{ibo}		85	pF
Output Capacitance V _{CB} = 10 Vdc, I _E = 0, 100 kHz ≤ f ≤ 1.0 MHz	C _{obo}		15	pF

(3)Pulse Test: Pulse Width 250 to 350μs, Duty Cycle ≤ 2.0%.