- **1N4565A THRU 1N4584A AVAILABLE IN JANHC AND JANKC PER MIL-PRF-19500/452**
- **ALL JUNCTIONS COMPLETELY PROTECTED WITH SILICON DIOXIDE**
- **6.4 VOLT ZENER VOLTAGE ± 5%**
- **ELECTRICALLY EQUIVALENT TO 1N4565 THRU 1N4584A**
- **COMPATIBLE WITH ALL WIRE BONDING AND DIE ATTACH TECHNIQUES, WITH THE EXCEPTION OF SOLDER RELOW**

CD4565 thru CD4584A

MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C
Storage Temperature: -65°C to +175°C

REVERSE LEAKAGE CURRENT

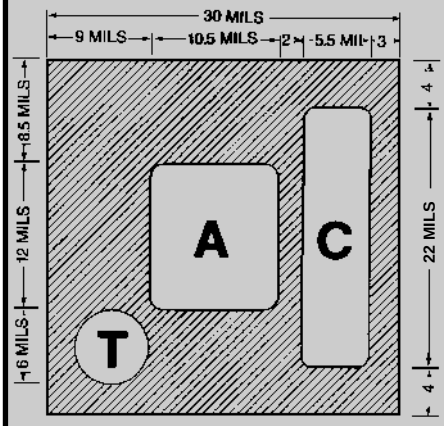
I_R = 2 μA @ 25°C & V_R = 3 Vdc

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise speci½ed.

TYPE NUMBER 6.4V ± 5%	ZENER TEST CURRENT I_{ZT}	EFFECTIVE TEMPERATURE COEFFICIENT	VOLTAGE TEMPERATURE STABILITY $^{3}V_{ZT}$ MAX -55° to + 100° (Note 2)	TEMPERATURE RANGE	MAXIMUM ZENER IMPEDANCE Z_{ZT} (Note 1)
	mA	%/°C	mV	°C	OHMS
CD4565 CD4565A	.5 .5	.01 .01	48 100	0 to + 75°C -55 to + 100°C	200 200
CD4566 CD4566A	.5 .5	.005 .005	24 50	0 to + 75°C -55 to + 100°C	200 200
CD4567 CD4567A	.5 .5	.002 .002	10 20	0 to + 75°C -55 to + 100°C	200 200
CD4568 CD4568A	.5 .5	.001 .001	5 10	0 to + 75°C -55 to + 100°C	200 200
CD4569 CD4569A	.5 .5	.0005 .0005	2.5 5	0 to + 75°C -55 to + 100°C	200 200
CD4570 CD4570A	1.0 1.0	.01 .01	48 100	0 to + 75°C -55 to + 100°C	100 100
CD4571 CD4571A	1.0 1.0	.005 .005	24 50	0 to + 75°C -55 to + 100°C	100 100
CD4572 CD4572A	1.0 1.0	.002 .002	10 20	0 to + 75°C -55 to + 100°C	100 100
CD4573 CD4573A	1.0 1.0	.001 .001	5 10	0 to + 75°C -55 to + 100°C	100 100
CD4574 CD4574A	1.0 1.0	.0005 .0005	2.5 5	0 to + 75°C -55 to + 100°C	100 100
CD4575 CD4575A	2.0 2.0	.01 .01	48 100	0 to + 75°C -55 to + 100°C	50 50
CD4576 CD4576A	2.0 2.0	.005 .005	24 50	0 to + 75°C -55 to + 100°C	50 50
CD4577 CD4577A	2.0 2.0	.002 .002	10 20	0 to + 75°C -55 to + 100°C	50 50
CD4578 CD4578A	2.0 2.0	.001 .001	5 10	0 to + 75°C -55 to + 100°C	50 50
CD4579 CD4579A	2.0 2.0	.0005 .0005	2.5 5	0 to + 75°C -55 to + 100°C	50 50
CD4580 CD4580A	4.0 4.0	.01 .01	48 100	0 to + 75°C -55 to + 100°C	25 25
CD4581 CD4581A	4.0 4.0	.005 .005	24 50	0 to + 75°C -55 to + 100°C	25 25
CD4582 CD4582A	4.0 4.0	.002 .002	10 20	0 to + 75°C -55 to + 100°C	25 25
CD4583 CD4583A	4.0 4.0	.001 .001	5 10	0 to + 75°C -55 to + 100°C	25 25
CD4584 CD4584A	4.0 4.0	.0005 .0005	2.5 5	0 to + 75°C -55 to + 100°C	25 25

. **NOTE 1** Zener impedance is derived by superimposing on I_{ZT} A 60Hz rms a.c. current equal to 10% of I_{ZT}.

NOTE 2 The maximum allowable change observed over the entire temperature range i.e.,the diode voltage will not exceed the speci½ed mV at any discrete temperature between the established limits, per JEDEC standard No.5.



Backside is not cathode and must be electrically isolated.

T = Metallization Test Pad

DESIGN DATA

METALLIZATION:
Top: C (Cathode) .....Al
A (Anode) ..... Al
Back: .....Au

AL THICKNESS.....25,000 Å Min

GOLD THICKNESS.....4,000 Å Min

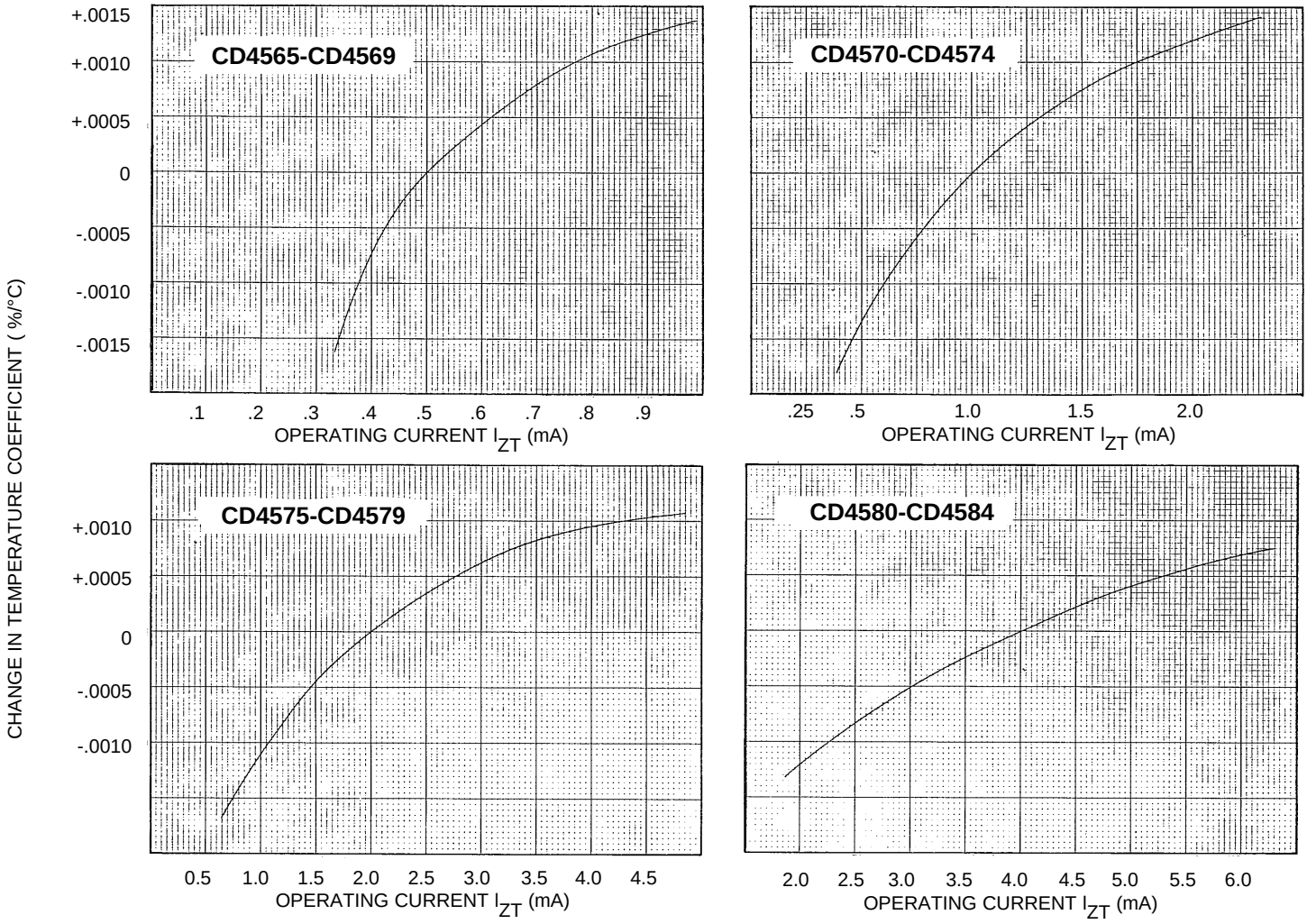
CHIP THICKNESS. .....10 Mils

CIRCUIT LAYOUT DATA:
Backside must be electrically isolated.
Backside is not cathode.
For Zener operation cathode must be operated positive with respect to anode.

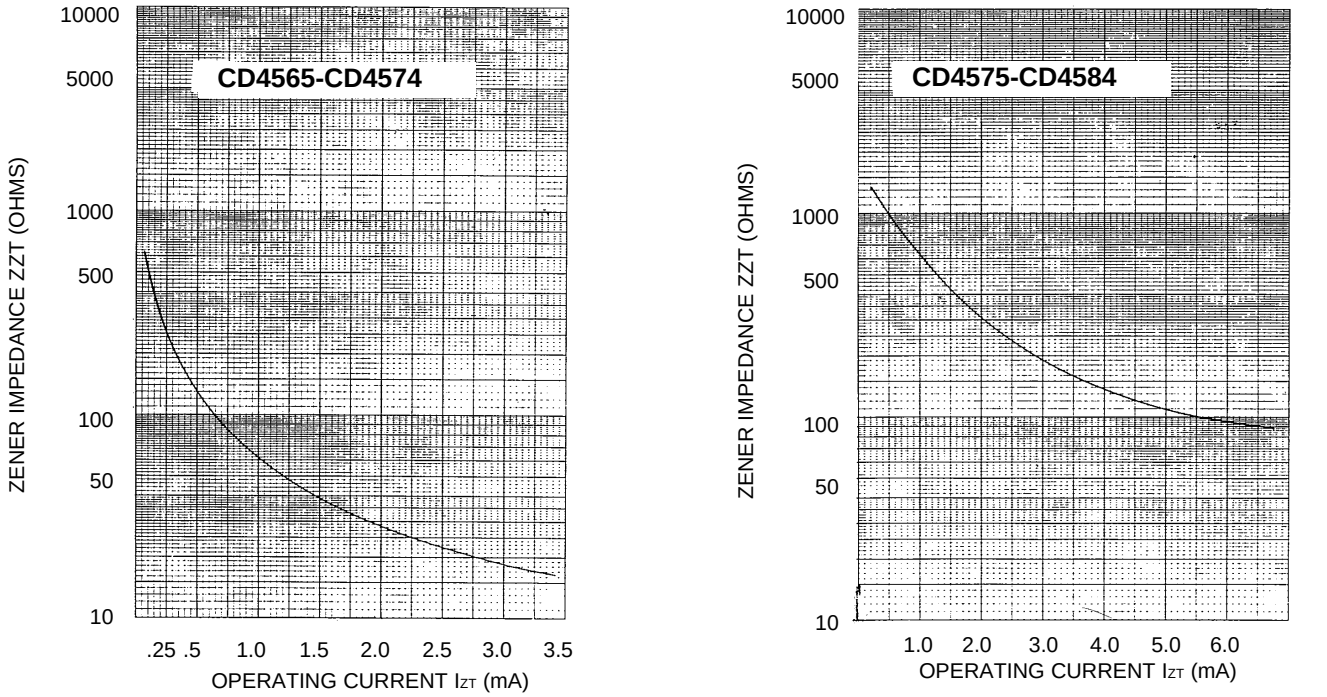
TOLERANCES: ALL
Dimensions ± 2 mils

Microsemi
6 LAKE STREET, LAWRENCE, MASSACHUSETTS 01841
PHONE (978) 620-2600 FAX (978) 689-0803
WEBSITE: http://www.microsemi.com

CD4565 thru CD4584A



TYPICAL CHANGE OF TEMPERATURE COEFFICIENT WITH CHANGE IN OPERATING CURRENT



ZENER IMPEDANCE VS. OPERATING CURRENT