- **9.1 VOLT NOMINAL ZENER VOLTAGE ± 5%**
- **TEMPERATURE COMPENSATED ZENER REFERENCE DIODES**
- **LOW CURRENT RANGE: 0.5 AND 1.0 mA**
- **METALLURGICALLY BONDED**
- **DOUBLE PLUG CONSTRUCTION**

1N4765 thru 1N4774A

MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C
Storage Temperature: -65°C to +175°C
DC Power Dissipation: 500mW @ +50°C
Power Derating: 4 mW / °C above +50°C

REVERSE LEAKAGE CURRENT

I_R = 10 μA @ 25°C & V_R = 6 Vdc

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise speci½ed.

JEDEC TYPE NUMBER	ZENER VOLTAGE V_z @ I_{ZT} (Note 3)	ZENER TEST CURRENT I_{ZT}	MAXIMUM DYNAMIC IMPEDANCE Z_{ZT} (Note 1)	MAXIMUM VOLTAGE TEMPERATURE STABILITY $^3V_{ZT}$ (Note 2)	TEMPERATURE RANGE	EFFECTIVE TEMPERATURE COEFFICIENT
	VOLTS	mA	OHMS	mV	°C	% / °C
1N4765	9.1	0.5	350	68	0 to + 75	0.01
1N4765A	9.1	0.5	350	141	-55 to +100	0.01
1N4766	9.1	0.5	350	34	0 to + 75	0.005
1N4766A	9.1	0.5	350	70	-55 to +100	0.005
1N4767	9.1	0.5	350	14	0 to + 75	0.002
1N4767A	9.1	0.5	350	28	-55 to +100	0.002
1N4768	9.1	0.5	350	6.8	0 to + 75	0.001
1N4768A	9.1	0.5	350	14	-55 to +100	0.001
1N4769	9.1	0.5	350	3.4	0 to + 75	0.0005
1N4769A	9.1	0.5	350	7	-55 to +100	0.0005
1N4770	9.1	1.0	200	68	0 to + 75	0.01
1N4770A	9.1	1.0	200	141	-55 to +100	0.01
1N4771	9.1	1.0	200	34	0 to + 75	0.005
1N4771A	9.1	1.0	200	70	-55 to +100	0.005
1N4772	9.1	1.0	200	14	0 to + 75	0.002
1N4772A	9.1	1.0	200	28	-55 to +100	0.002
1N4773	9.1	1.0	200	6.8	0 to + 75	0.001
1N4773A	9.1	1.0	200	14	-55 to +100	0.001
1N4774	9.1	1.0	200	3.4	0 to + 75	0.0005
1N4774A	9.1	1.0	200	7	-55 to +100	0.0005

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.

NOTE 3 Zener voltage range equals 9.1 volts ± 5%.

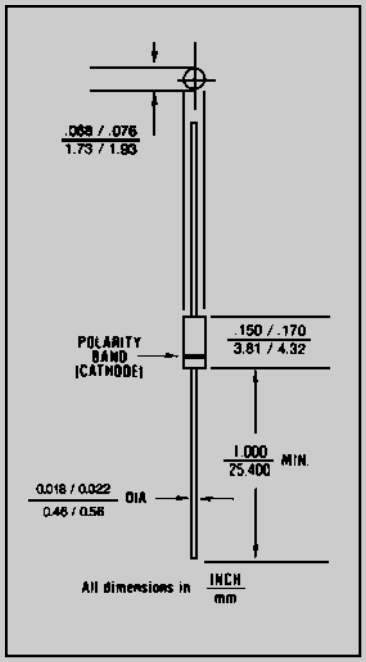


FIGURE 1

DESIGN DATA

CASE: Hermetically sealed glass case. DO – 35 outline.

LEAD MATERIAL: Copper clad steel.

LEAD FINISH: Tin / Lead

POLARITY: Diode to be operated with the banded (cathode) end positive.

MOUNTING POSITION: ANY.

Microsemi

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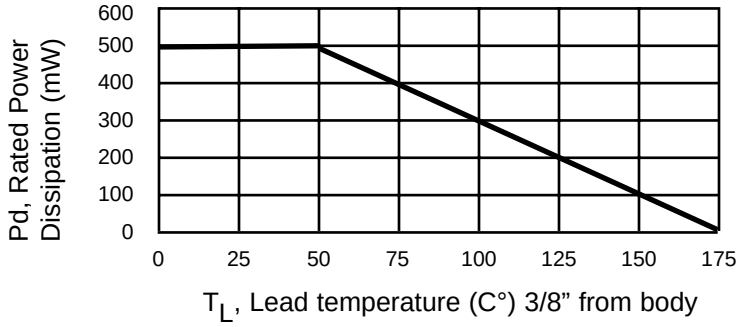


FIGURE 2
POWER DERATING CURVE

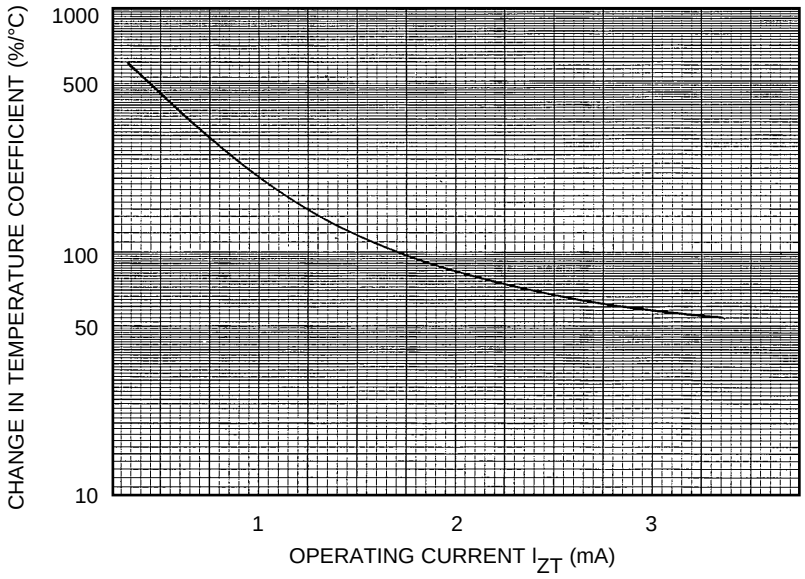


FIGURE 3
ZENER IMPEDANCE VS. OPERATING CURRENT

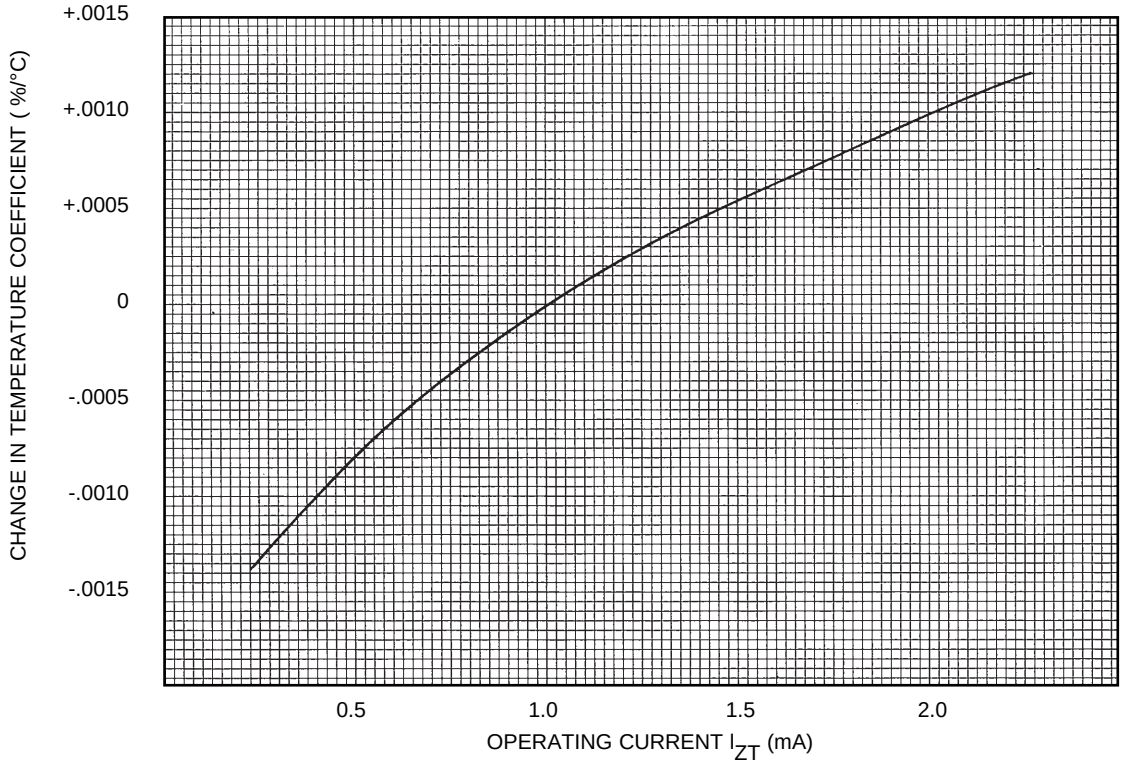


FIGURE 4
TYPICAL CHANGE OF TEMPERATURE COEFFICIENT WITH CHANGE IN OPERATING CURRENT