- **1N941B, 1N943B, 1N944B AND 1N945B AVAILABLE IN JAN, JANTX AND JANTXV PER MIL-PRF-19500/157**
- **1N941B-1, 1N943B-1, 1N944B-1 AND 1N945B-1 AVAILABLE IN JAN, JANTX, JANTXV AND JANS PER MIL-PRF-19500/157**
- **11.7 VOLT NOMINAL ZENER VOLTAGE**
- **TEMPERATURE COMPENSATED ZENER REFERENCE DIODES**
- **METALLURGICALLY BONDED**

1N941 thru 1N945B and 1N941B-1 thru 1N945B-1

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 = 15μA @ 25°C & V_R = 8 Vdc

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

JEDEC TYPE NUMBER	ZENER VOLTAGE v_z @ I_{ZT}	ZENER TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE ZZT (Note 1)	VOLTAGE TEMPERATURE STABILITY ΔV_{ZT} MAXIMUM (Note 2)	TEMPERATURE RANGE	EFFECTIVE TEMPERATURE COEFFICIENT
	VOLTS	mA	OHMS	mV	°C	% / °C
1N941	11.12—12.28	7.5	30	88	0 to + 75	0.01
1N941A	11.12—12.28	7.5	30	181	-55 to +100	0.01
1N941B	11.12—12.28	7.5	30	239	-55 to +150	0.01
1N942	11.12—12.28	7.5	30	44	0 to + 75	0.005
1N942A	11.12—12.28	7.5	30	90	-55 to +100	0.005
1N942B	11.12—12.28	7.5	30	120	-55 to +150	0.005
1N943	11.12—12.28	7.5	30	18	0 to + 75	0.002
1N943A	11.12—12.28	7.5	30	36	-55 to +100	0.002
1N943B	11.12—12.28	7.5	30	47	-55 to +150	0.002
1N944	11.12—12.28	7.5	30	9	0 to + 75	0.001
1N944A	11.12—12.28	7.5	30	18	-55 to +100	0.001
1N944B	11.12—12.28	7.5	30	24	-55 to +150	0.001
1N945	11.12—12.28	7.5	30	4	0 to + 75	0.0005
1N945A	11.12—12.28	7.5	30	9	-55 to +150	0.0005
1N945B	11.12 -12.28	7.5	30	12	-55 to +150	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 specified mV at any discrete temperature between the established limits, per JEDEC standard No.5.

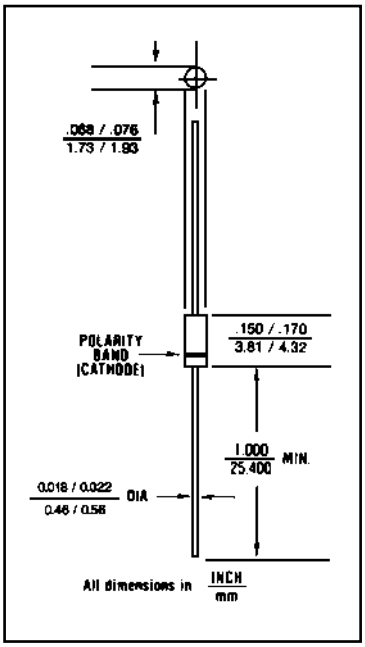


FIGURE 1

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.

COMPENSATED DEVICES INCORPORATED
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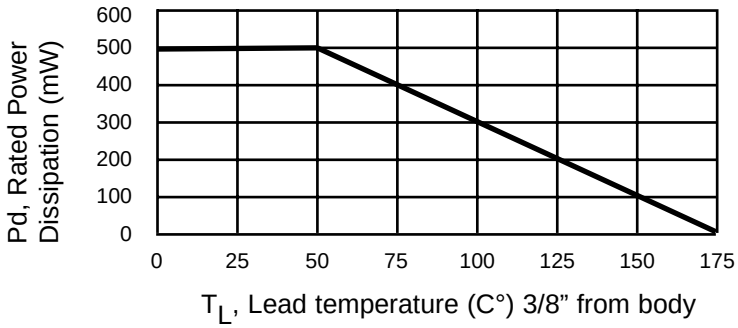


FIGURE 2
POWER DERATING CURVE

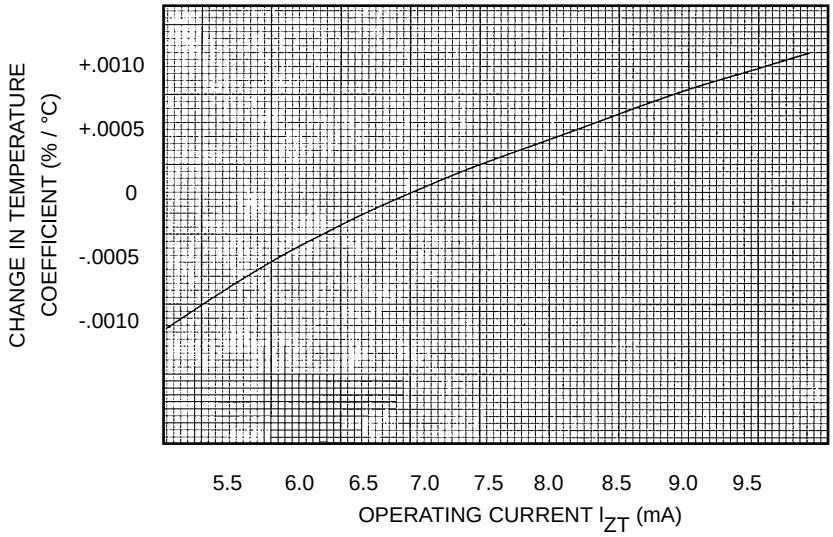


FIGURE 3
TYPICAL CHANGE OF TEMPERATURE COEFFICIENT WITH CHANGE IN OPERATING CURRENT

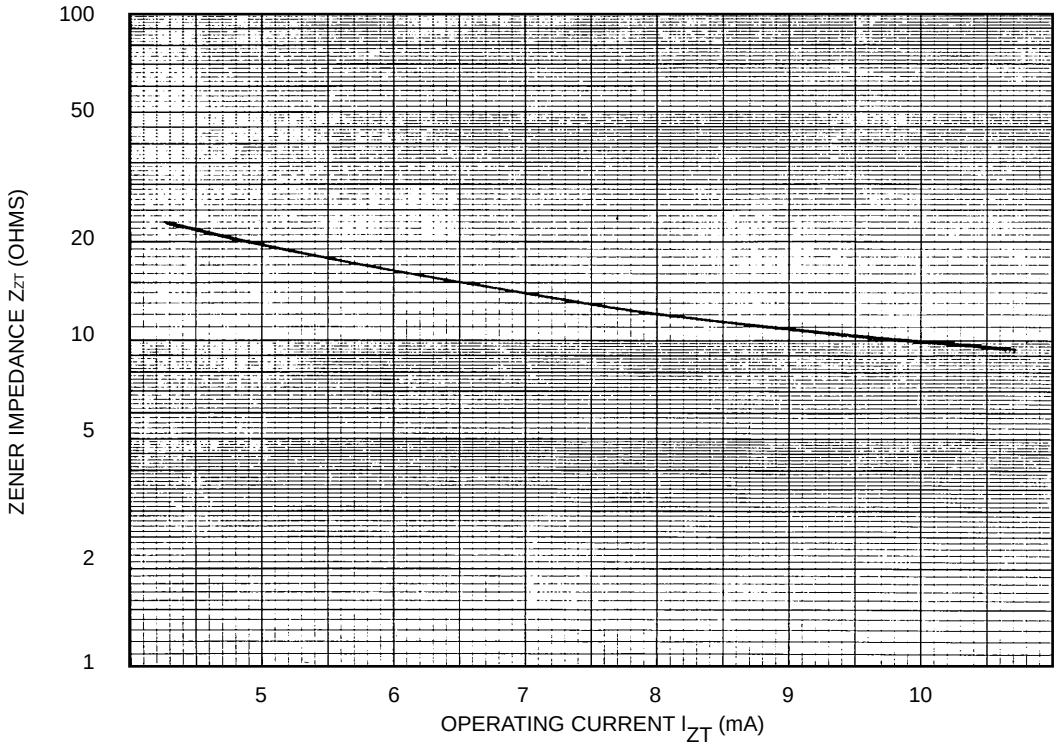


FIGURE 4
ZENER IMPEDANCE VS. OPERATING CURRENT