- 1N935B-1, 1N937B-1 AND 1N938B-1 AVAILABLE IN JAN, JANTX, JANTXV AND JANS PER MIL-PRF-19500/156
- 9.0 VOLT NOMINAL ZENER VOLTAGE
- TEMPERATURE COMPENSATED ZENER REFERENCE DIODES
- METALLURGICALLY BONDED

1N935 thru 1N938B and 1N935B-1 thru 1N938B-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 = 10μA @ 25°C & V_R = 6 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 (Note 1) Z_{ZT}	VOLTAGE TEMPERATURE STABILITY ΔV_{ZT} MAXIMUM (Note 2)	TEMPERATURE RANGE	EFFECTIVE TEMPERATURE COEFFICIENT
	VOLTS	mA	OHMS	mV	°C	% / °C
1N935	8.55—9.45	7.5	20	67	0 to + 75	0.01
1N935A	8.55—9.45	7.5	20	139	-55 to +100	0.01
1N935B	8.55—9.45	7.5	20	184	-55 to +150	0.01
1N936	8.55—9.45	7.5	20	34	0 to + 75	0.005
1N936A	8.55—9.45	7.5	20	70	-55 to +100	0.005
1N936B	8.55—9.45	7.5	20	92	-55 to +150	0.005
1N937	8.55—9.45	7.5	20	13	0 to + 75	0.002
1N937A	8.55—9.45	7.5	20	28	-55 to +100	0.002
1N937B	8.55—9.45	7.5	20	37	-55 to +150	0.002
1N938	8.55—9.45	7.5	20	6.7	0 to + 75	0.001
1N938A	8.55—9.45	7.5	20	13.9	-55 to +100	0.001
1N938B	8.55—9.45	7.5	20	19	-55 to +150	0.001

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.

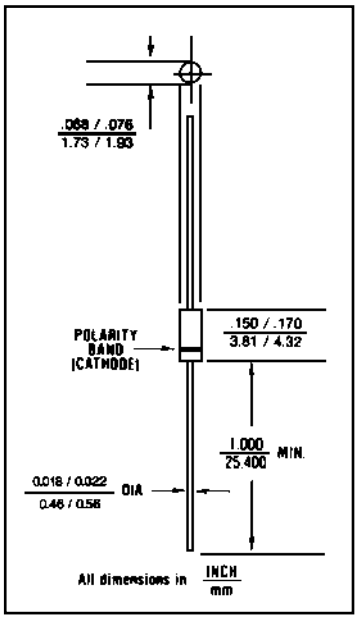


FIGURE 1

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
22 COREY STREET, MELROSE, MASSACHUSETTS 02176
PHONE (781) 665-1071 FAX (781) 665-7379
WEBSITE: http://www.cdi-diodes.com E-mail: mail@cdi-diodes.com

1N935 thru 1N938B
INCLUDING -1 VERSIONS

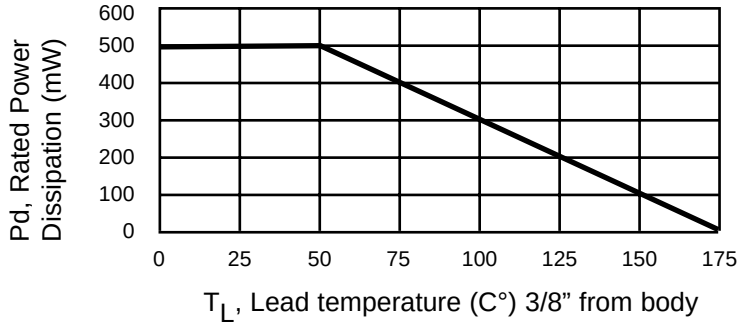


FIGURE 2
POWER DERATING CURVE

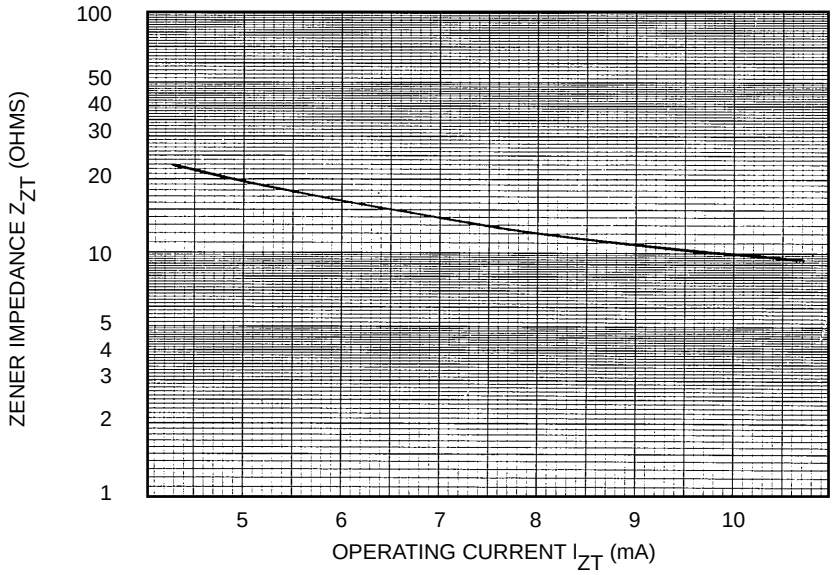


FIGURE 3
ZENER IMPEDANCE VS. OPERATING CURRENT

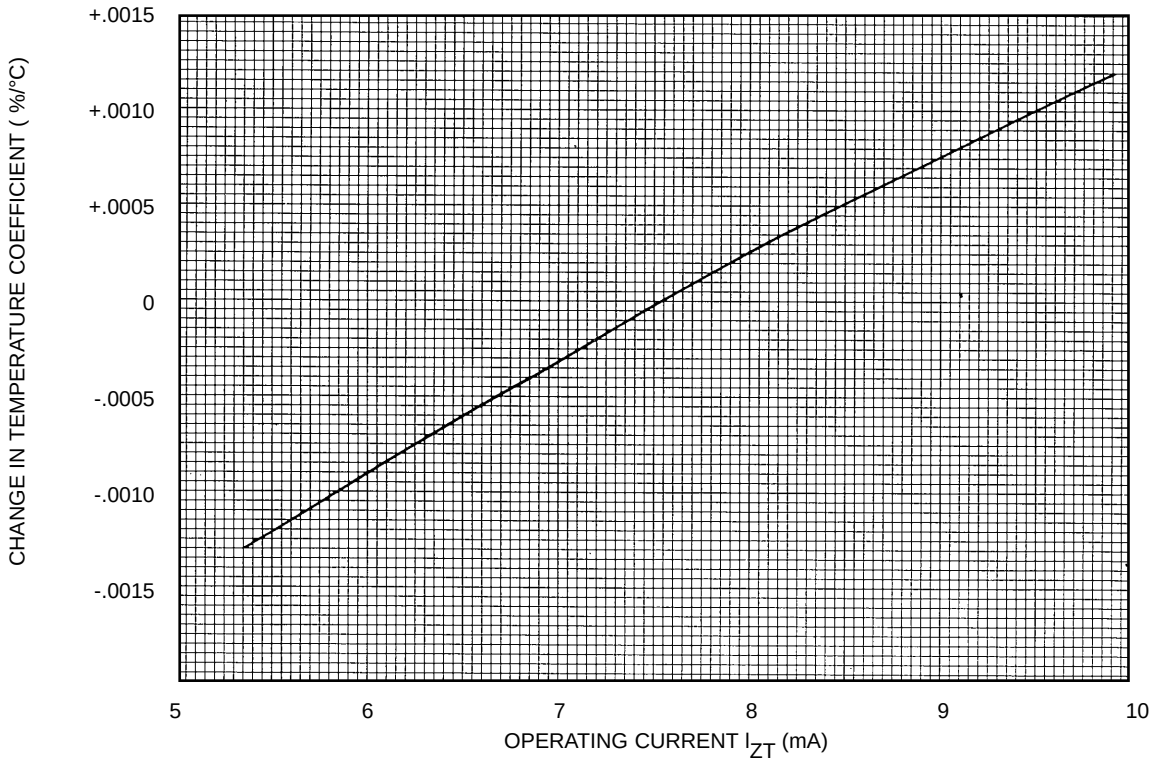


FIGURE 4
TYPICAL CHANGE OF TEMPERATURE COEFFICIENT WITH CHANGE IN OPERATING CURRENT