

- 1N935BUR-1, 1N937BUR-1, 1N938BUR-1, 1N939BUR-1 AVAILABLE IN JAN, JANTX AND JANTXV
- TEMPERATURE COMPENSATED ZENER REFERENCE DIODES
- LEADLESS PACKAGE FOR SURFACE MOUNT
- 9.0 VOLT NOMINAL ZENER VOLTAGE
- METALLURGICALLY BONDED (-1), DOUBLE PLUG CONSTRUCTION

1N935BUR-1 thru 1N939BUR-1
and
CDLL935 thru CDLL939B

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

$I_R = 10 \mu A$ @ 25°C & $V_R = 6 V_{dc}$

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

CDI TYPE NUMBER	ZENER VOLTAGE $V_Z @ I_{ZT}$	ZENER TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE Z_{ZT} (Note 1)	VOLTAGE TEMPERATURE STABILITY ΔV_{ZT} MAXIMUM (Note 2)	TEMPERATURE RANGE	EFFECTIVE TEMPERATURE COEFFICIENT
	VOLTS	mA	OHMS	mV	°C	% / °C
CDLL935	8.55 - 9.45	7.5	20	67	0 to + 75	0.01
CDLL935A	8.55 - 9.45	7.5	20	139	-55 to +100	0.01
CDLL935B	8.55 - 9.45	7.5	20	184	-55 to +150	0.01
CDLL936	8.55 - 9.45	7.5	20	34	0 to + 75	0.005
CDLL936A	8.55 - 9.45	7.5	20	70	-55 to +100	0.005
CDLL936B	8.55 - 9.45	7.5	20	92	-55 to +150	0.005
CDLL937	8.55 - 9.45	7.5	20	13	0 to + 75	0.002
CDLL937A	8.55 - 9.45	7.5	20	28	-55 to +100	0.002
CDLL937B	8.55 - 9.45	7.5	20	37	-55 to +150	0.002
CDLL938	8.55 - 9.45	7.5	20	6.7	0 to + 75	0.001
CDLL938A	8.55 - 9.45	7.5	20	13.9	-55 to +100	0.001
CDLL938B	8.55 - 9.45	7.5	20	18	-55 to +150	0.001
CDLL939	8.55 - 9.45	7.5	20	3.3	0 to + 75	0.0005
CDLL939A	8.55 - 9.45	7.5	20	7	-55 to +100	0.0005
CDLL939B	8.55 - 9.45	7.5	20	9	-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.

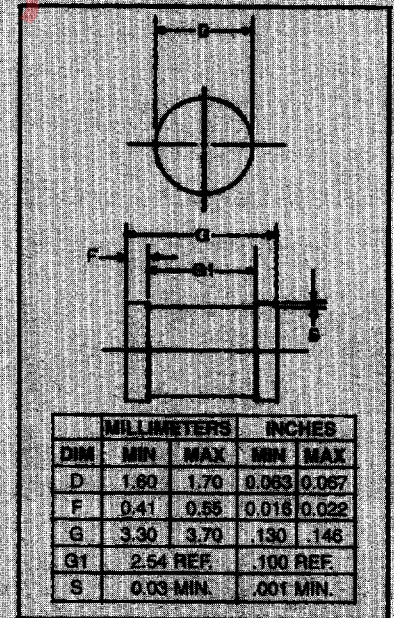


FIGURE 1

DESIGN DATA

CASE: DO-213AA, Hermetically sealed glass case. (MELF, SOD-80, LL34)

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: Junction to End Cap = 100 °C/W maximum

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

MOUNTING POSITION: Any.

MOUNTING SURFACE SELECTION: The Axial Coefficient of Expansion (COE) of this Device is Approximately +6PPM/°C. The COE of the Mounting Surface System Should Be Selected To Provide A Suitable Match With This Device.



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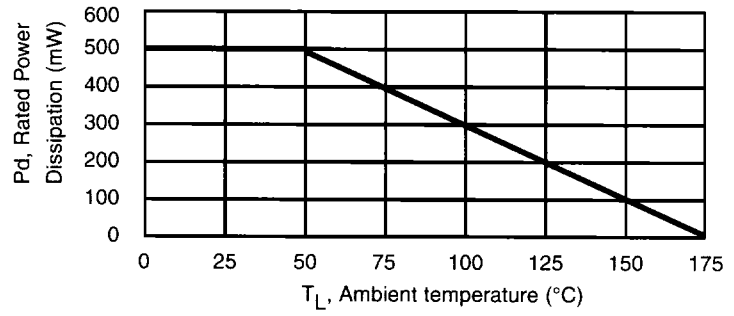
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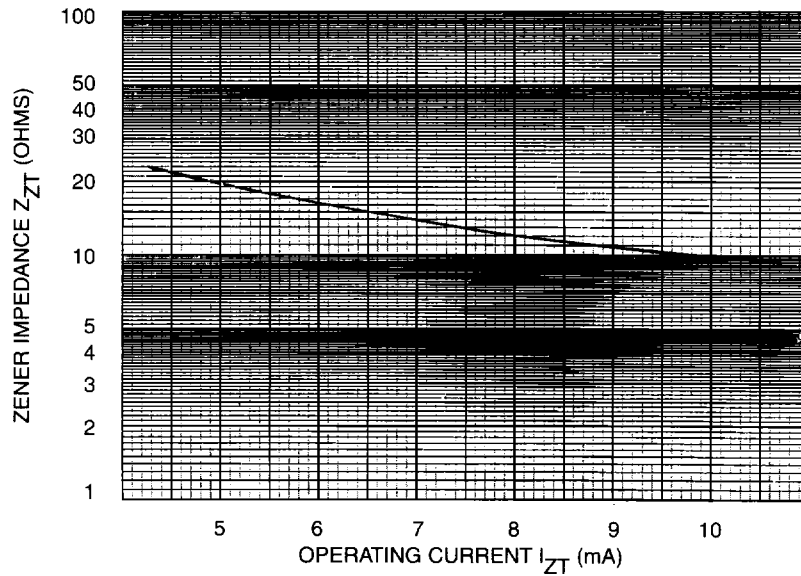
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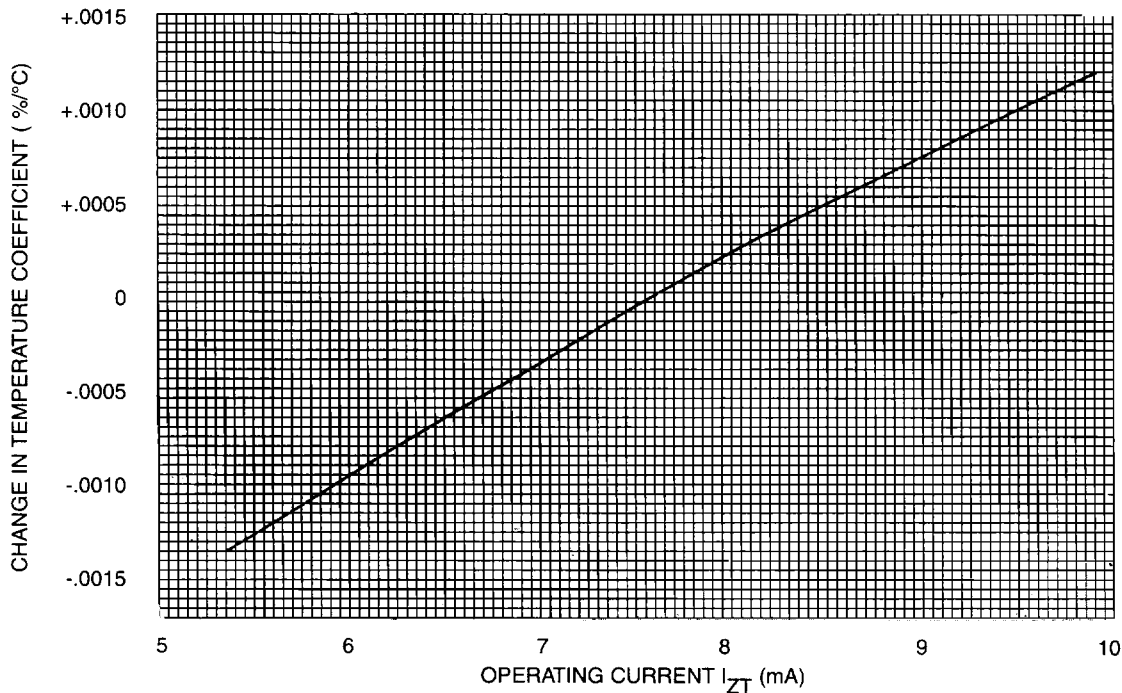
CDLL935 thru CDLL939B



**FIGURE 2
POWER DERATING CURVE**



**FIGURE 3
ZENER IMPEDANCE VS. OPERATING CURRENT**



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