- **1N941BUR-1, 1N943UR-1B, 1N944BUR-1 AND 1N945BUR-1 AVAILABLE IN JAN, JANTX, JANTXV AND JANS PER MIL-PRF-19500/157**
- **TEMPERATURE COMPENSATED ZENER REFERENCE DIODES**
- **LEADLESS PACKAGE FOR SURFACE MOUNT**
- **11.7 VOLT NOMINAL ZENER VOLTAGE**
- **METALLURGICALLY BONDED, DOUBLE PLUG CONSTRUCTION**

1N941BUR-1 thru1N945BUR-1 and CDLL941 thru CDLL945B

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

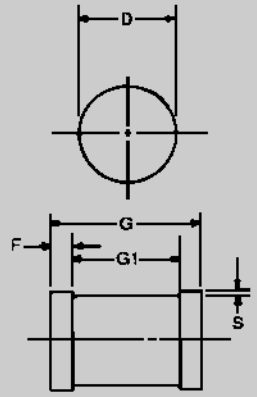
I_R = 15 μA @ 25°C & V_R = 8 Vdc

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 V_{ZT} MAXIMUM (Note 2)	TEMPERATURE RANGE	EFFECTIVE TEMPERATURE COEFFICIENT
	VOLTS	mA	OHMS	mV	°C	% / °C
CDLL941	11.12 - 12.28	7.5	30	88	0 to + 75	0.01
CDLL941A	11.12 - 12.28	7.5	30	181	-55 to +100	0.01
CDLL941B	11.12 - 12.28	7.5	30	239	-55 to +150	0.01
CDLL942	11.12 - 12.28	7.5	30	44	0 to + 75	0.005
CDLL942A	11.12 - 12.28	7.5	30	90	-55 to +100	0.005
CDLL942B	11.12 - 12.28	7.5	30	120	-55 to +150	0.005
CDLL943	11.12 - 12.28	7.5	30	18	0 to + 75	0.002
CDLL943A	11.12 - 12.28	7.5	30	36	-55 to +100	0.002
CDLL943B	11.12 - 12.28	7.5	30	47	-55 to +150	0.002
CDLL944	11.12 - 12.28	7.5	30	9	0 to + 75	0.001
CDLL944A	11.12 - 12.28	7.5	30	18	-55 to +100	0.001
CDLL944B	11.12 - 12.28	7.5	30	24	-55 to +150	0.001
CDLL945	11.12 - 12.28	7.5	30	4	0 to + 75	0.0005
CDLL945A	11.12 - 12.28	7.5	30	9	-55 to +100	0.0005
CDLL945B	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.



	MILLIMETERS		INCHES	
DIM	MIN	MAX	MIN	MAX
D	1.60	1.70	0.063	0.067
F	0.41	0.55	0.016	0.022
G	3.30	3.70	.130	.146
G1	2.54 REF.		.100 REF.	
S	0.03 MIN.		.001 MIN.	

FIGURE 1

DESIGN DATA

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

LEAD FINISH: Tin / Lead

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

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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CDLL941
thru
CDLL945B

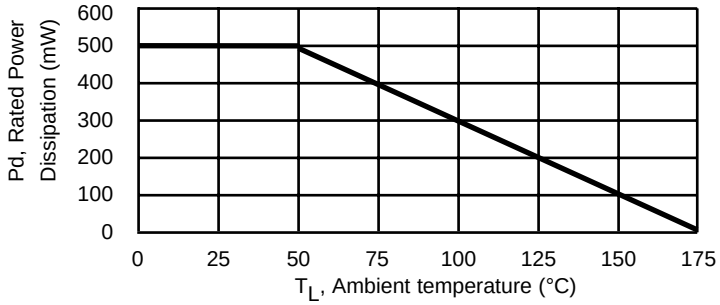

FIGURE 2

POWER DERATING CURVE

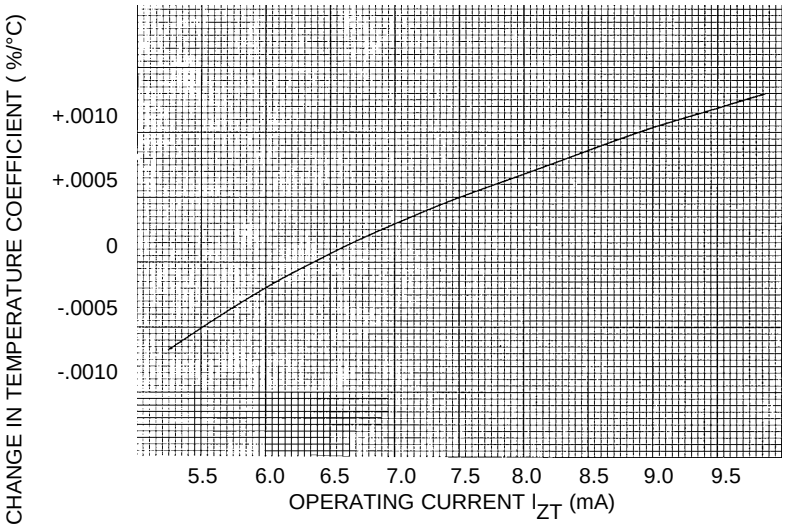

FIGURE 3

TYPICAL CHANGE OF TEMPERATURE COEFFICIENT WITH CHANGE IN OPERATING CURRENT

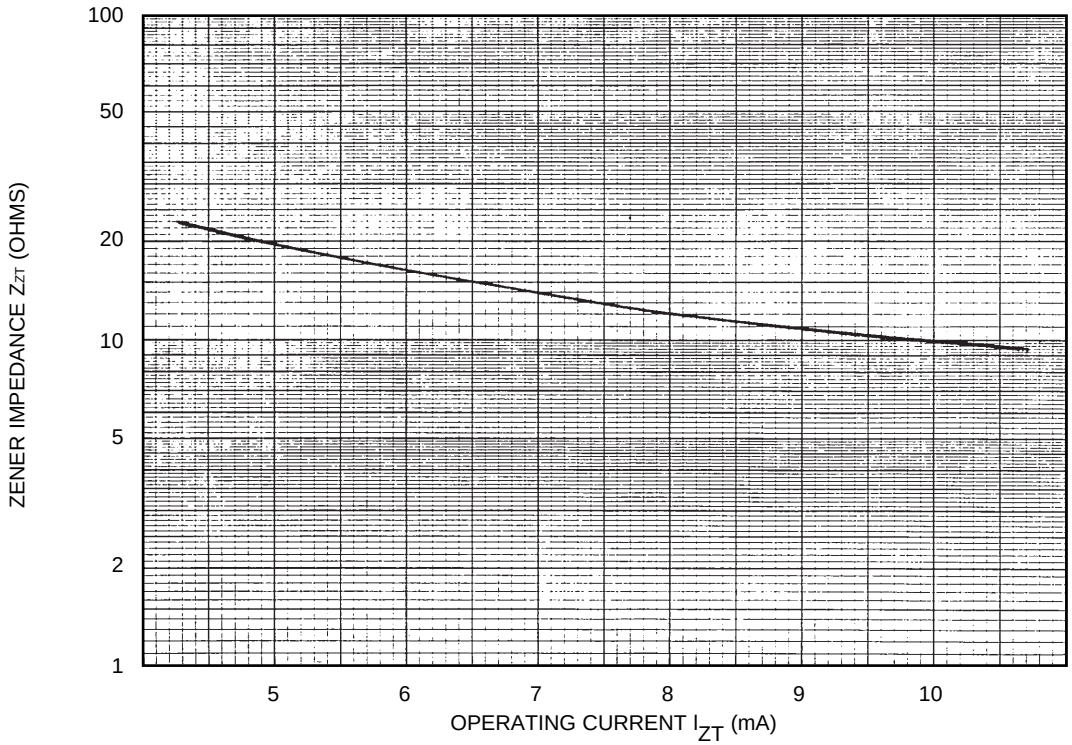

FIGURE 4

ZENER IMPEDANCE VS. OPERATING CURRENT

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