THE DATASHEET OF

CDLL4130

- **1N4099UR-1 THRU 1N4135UR-1 AVAILABLE IN JAN, JANTX, JANTXV AND JANS PER MIL-PRF-19500/435**
- **LEADLESS PACKAGE FOR SURFACE MOUNT**
- **LOW CURRENT OPERATION AT 250 μA**
- **METALLURGICALLY BONDED**
- **DOU-**

1N4099UR-1 thru 1N4135UR-1 and CDLL4099 thru CDLL4135

MAXIMUM RATINGS

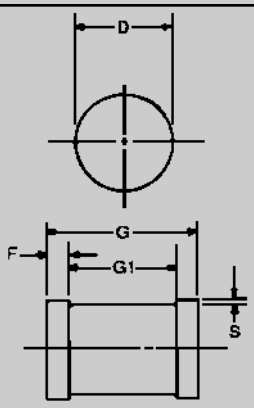
Junction and Storage Temperature: -65°C to +175°C
DC Power Dissipation: 500mW @ T_{EC} = +125°C
Power Derating: 10mW/ °C above T_{EC} = +125°C
Forward Derating @ 200 mA: 1.1 Volts maximum

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

CDI TYPE NUMBER	NOMINAL ZENER VOLTAGE V_Z @ I_{ZT} (Note 1)	ZENER TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE Z_{ZT} (Note 2)	MAXIMUM REVERSE LEAKAGE CURRENT I_R @ V_R		MAXIMUM ZENER CURRENT I_{ZM}
	VOLTS	μA	OHMS	μA	VOLTS	mA
CDLL4099	6.8	250	200	10	5.17	56
CDLL4100	7.5	250	200	10	5.70	51
CDLL4101	8.2	250	200	1.0	6.24	46
CDLL4102	8.7	250	200	1.0	6.61	44
CDLL4103	9.1	250	200	1.0	6.92	42
CDLL4104	10	250	200	1.0	7.60	38
CDLL4105	11	250	200	.05	8.44	35
CDLL4106	12	250	200	.05	9.12	32
CDLL4107	13	250	200	.05	9.87	29
CDLL4108	14	250	200	.05	10.65	27
CDLL4109	15	250	100	.05	11.40	25
CDLL4110	16	250	100	.05	12.15	24
CDLL4111	17	250	100	.05	12.92	22
CDLL4112	18	250	100	.05	13.67	21
CDLL4113	19	250	150	.05	14.44	20
CDLL4114	20	250	150	.01	15.20	19
CDLL4115	22	250	150	.01	16.72	17
CDLL4116	24	250	150	.01	18.25	16
CDLL4117	25	250	150	.01	19.00	15
CDLL4118	27	250	150	.01	20.46	14
CDLL4119	28	250	200	.01	21.28	14
CDLL4120	30	250	200	.01	22.80	13
CDLL4121	33	250	200	.01	25.08	12
CDLL4122	36	250	200	.01	27.38	11
CDLL4123	39	250	200	.01	29.65	9.8
CDLL4124	43	250	250	.01	32.65	8.9
CDLL4125	47	250	250	.01	35.75	8.1
CDLL4126	51	250	300	.01	38.76	7.5
CDLL4127	56	250	300	.01	42.60	6.7
CDLL4128	60	250	400	.01	45.60	6.4
CDLL4129	62	250	500	.01	47.10	6.1
CDLL4130	68	250	700	.01	51.68	5.6
CDLL4131	75	250	700	.01	57.00	5.1
CDLL4132	82	250	800	.01	62.32	4.6
CDLL4133	87	250	1000	.01	66.12	4.4
CDLL4134	91	250	1200	.01	69.16	4.2
CDLL4135	100	250	1500	.01	76.00	3.8

NOTE 1 The CDI type numbers shown above have a Zener voltage tolerance of ± 5% of the nominal Zener voltage. Nominal Zener voltage is measured with the device junction in thermal equilibrium at an ambient temperature of 25°C ± 3°C. A "C" suffix denotes a ± 2% tolerance and a "D" suffix denotes a ± 1% tolerance.

NOTE 2 Zener impedance is derived by superimposing on I_{ZT}, A 60 Hz rms a.c. current equal to 10% of I_{ZT} (25 μA a.c.).



	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

THERMAL RESISTANCE: ($R_{\Theta JEC}$): 100 °C/W maximum at L = 0 inch

THERMAL IMPEDANCE: ($Z_{\Theta JX}$): 35 °C/W maximum

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

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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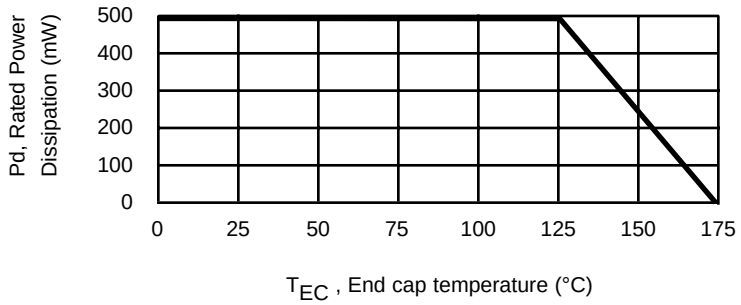
1N4099UR-1 thru 1N4135UR-1
CDLL4099 thru CDLL4135

FIGURE 2



POWER DERATING CURVE

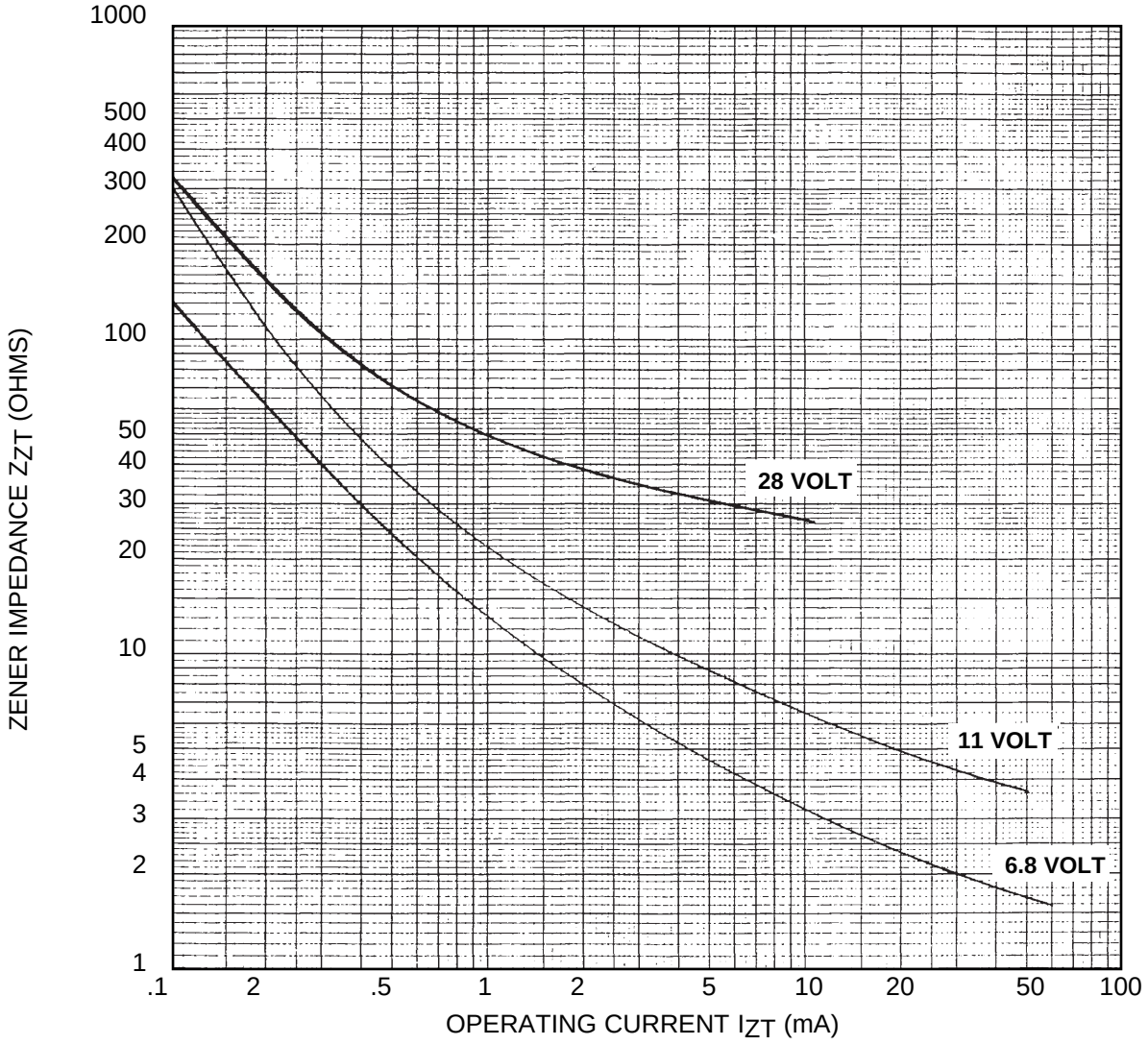


FIGURE 3
ZENER IMPEDANCE VS. OPERATING CURRENT

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