

• 1N3821AUR-1 thru 1N3828AUR-1 AVAILABLE IN JAN, JANTX AND JAN-TXV

PER MIL-PRF-19500/115

- LEADLESS PACKAGE FOR SURFACE MOUNT
- DOUBLE PLUG CONSTRUCTION

1N3821AUR-1
thru
1N3828AUR-1
and
CDLL3821 thru CDLL 3828A

MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C

Storage Temperature: -65°C to +175°C

DC Power Dissipation: 1 watt @ $T_{EC} = 125^{\circ}\text{C}$

Power Derating: 20 mW / °C above $T_{EC} = 125^{\circ}\text{C}$

Forward Voltage @ 200mA = 1.2 volts maximum

ELECTRICAL CHARACTERISTICS @ 25°C

CDI TYPE NUMBER (NOTE 1)	NOMINAL ZENER VOLTAGE $V_Z @ 1_{ZT}$ (NOTE 3)	ZENER TEST CURRENT 1_{ZT}	MAXIMUM ZENER IMPEDANCE $Z_{ZT} @ 1_{ZT}$ $Z_{ZK} @ 1_{ZK}=1\text{mA}$ (NOTE 2)		MAX. DC ZENER CURRENT 1_{ZM}	MAX. REVERSE LEAKAGE CURRENT $I_R @ V_R$	
	VOLTS	mA	OHMS	OHMS	mA	μA	VOLTS
CDLL3821	3.3	76	10	400	276	100	1
CDLL3821A	3.3	76	10	400	276	100	1
CDLL3822	3.6	69	10	400	252	75	1
CDLL3822A	3.6	69	10	400	252	75	1
CDLL3823	3.9	64	9	400	238	25	1
CDLL3823A	3.9	64	9	400	238	25	1
CDLL3824	4.3	58	9	400	213	5	1
CDLL3824A	4.3	58	9	400	213	5	1
CDLL3825	4.7	53	8	500	194	5	1
CDLL3825A	4.7	53	8	500	194	5	1
CDLL3826	5.1	49	7	550	178	3	1
CDLL3826A	5.1	49	7	550	178	3	1
CDLL3827	5.6	45	5	600	162	3	2
CDLL3827A	5.6	45	5	600	162	3	2
CDLL3828	6.2	41	2	700	146	3	3
CDLL3828A	6.2	41	2	700	146	3	3

NOTE 1 No suffix = $\pm 10\%$ tolerance on nominal Zener voltage, suffix "A" signifies $\pm 5\%$, "C" suffix signifies $\pm 2\%$ and "D" suffix signifies $\pm 1\%$.

NOTE 2 Zener impedance is derived by superimposing on 1_{ZT} A 60Hz rms a.c. current equal to 10% of 1_{ZT} .

NOTE 3 Zener voltage is measured with the device junction in thermal equilibrium at an ambient temperature of $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$.

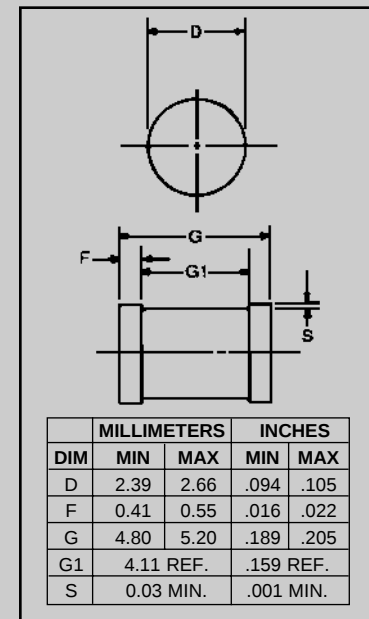


FIGURE 1

DESIGN DATA

CASE: DO-213AB, Hermetically sealed glass case. (MELF, LL41)

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: ($R_{\theta JEC}$): 50 °C/W maximum at L = 0 inch

THERMAL IMPEDANCE: ($Z_{\theta JX}$): 15 °C/W maximum

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.

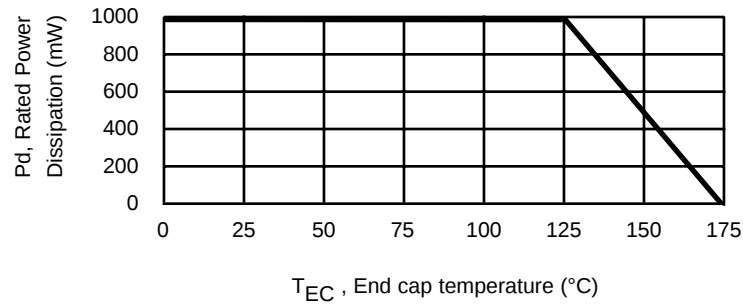


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1N3821AUR-1 thru 1N3828AUR-1 and CDLL3821A thru CDLL3828A

FIGURE 2



POWER DERATING CURVE

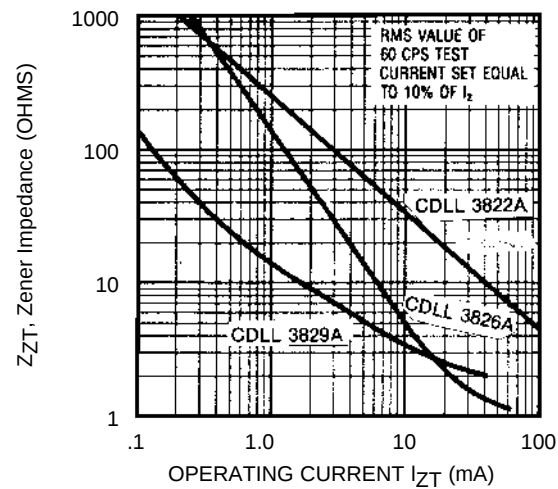


FIGURE 3
ZENER IMPEDANCE
VS.
OPERATING CURRENT

Mouser Electronics

Authorized Distributor

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Microsemi:

[CDLL3823](#) [JANTX1N3823AUR-1](#) [JANTX1N3825AUR-1](#) [JAN1N3827AUR-1](#) [CDLL3822](#) [CDLL3822A](#) [CDLL3823A](#)
[JAN1N3821AUR-1](#) [JANTXV1N3825AUR-1](#) [CDLL3827](#) [JANTXV1N3823AUR-1](#) [CDLL3821](#) [CDLL3828A](#) [CDLL3827A](#)
[JANTX1N3827AUR-1](#) [CDLL3824](#) [CDLL3824A](#) [CDLL3826A](#) [CDLL3828](#) [JANTX1N3821AUR-1](#) [CDLL3825](#)
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