

- CURRENT REGULATOR DIODES
- LEADLESS PACKAGE FOR SURFACE MOUNT
- CONSTANT CURRENT OVER WIDE VOLTAGE RANGE
- HIGH SOURCE IMPEDANCE
- METALLURGICALLY BONDED

**CDLL250
thru
CDLL257**

MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C
Storage Temperature: -65°C to +175°C
DC Power Dissipation: 500 mW @ +50°C
Power Derating: 4 mW / °C above +50°C

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified

TYPE NUMBER	REGULATOR CURRENT I _p (mA) @ V _S = 25V (Note 1)			MINIMUM DYNAMIC IMPEDANCE @ V _S = 25V Z _S (KΩ) (Note 2)	MINIMUM KNEE IMPEDANCE @ V _K = 6.0 V Z _K (KΩ) (Note 3)	MAXIMUM LIMITING VOLTAGE @ I _L = 0.8 I _p (min) V _L (VOLTS)	PEAK OPERATING VOLTAGE VOLTS
	NOM	MIN	MAX				
CDLL250	5.10	4.59	5.61	100	4.0	3.67	80
CDLL251	5.60	5.04	6.16	90	4.0	4.03	80
CDLL252	6.20	5.58	6.82	80	3.0	4.46	70
CDLL253	6.80	6.12	7.48	70	2.0	4.90	70
CDLL254	7.50	6.75	8.25	50	1.5	5.40	60
CDLL255	8.20	7.38	9.02	30	1.5	5.90	60
CDLL256	9.10	8.19	10.01	20	1.0	6.55	50
CDLL257	10.00	9.00	11.10	10	1.0	7.20	50

NOTE 1 Pulse measurement @ 1% duty cycle, 10 milliseconds maximum.

NOTE 2 Z_S is derived by superimposing A 90Hz RMS signal equal to 10% of V_S on V_S

NOTE 3 Z_K is derived by superimposing A 90Hz RMS signal equal to 10% of V_K on V_K

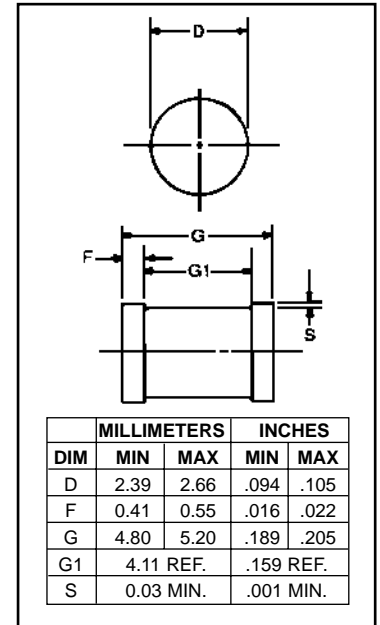


FIGURE 1

DESIGN DATA

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

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: (R_{QJEC}):
100 °C/W maximum at L = 0 inch

THERMAL IMPEDANCE: (Z_{QJX}): 25
°C/W maximum

POLARITY: Diode to be operated with the band (cathode) end negative.

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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