

- AVAILABLE IN JAN, JANTX, JANTXV AND JANS PER MIL-PRF-19500/406
- 1.5 WATT ZENER DIODES
- NON CAVITY CONSTRUCTION
- METALLURGICALLY BONDED

1N6485US
THRU
1N6491US
AND
1N4460US
AND
1N4461US

MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C
Storage Temperature: -65°C to +200°C
Power Dissipation: 1.5W @ $T_A=+25^\circ\text{C}$
Power Derating: 10mW/°C above $T_A=+25^\circ\text{C}$
Forward Voltage: 1.0V dc @ $I_F=200\text{mA}$ dc
1.5 V dc @ $I_F=1\text{A}$ dc

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified

TYPE	ZENER VOLTAGE (NOM.) ±5%	TEST CURRENT I_{ZT}	DYNAMIC IMPEDENCE (MAX.) $Z_{ZT}@I_{ZT}$	KNEE IMPEDENCE (MAX.) $Z_{ZK}@I_{ZT}$	TEST CURRENT I_{ZK}	REVERSE CURRENT (MAX.) $I_R@V_R$	TEST VOLTAGE V_R	MAXIMUM CURRENT I_{ZM}	V_Z (REG) ΔV_Z	MAXIMUM SURGE
	VOLTS	mA	OHMS	OHMS	mA	μ A	VOLTS	MA	VOLTS	AMPS
1N6485US	3.3	76.0	10	400	1.0	50	1.0	433	.90	4.2
1N6486US	3.6	69.0	10	400	1.0	50	1.0	397	.80	3.9
1N6487US	3.9	64.0	9	400	1.0	35	1.0	366	.75	3.6
1N6488US	4.3	58.0	9	400	1.0	5.0	1.0	332	.70	3.3
1N6489US	4.7	53.0	8	500	1.0	4.0	1.0	304	.60	3.0
1N6490US	5.1	49.0	7	500	1.0	1.0	1.0	280	.50	2.7
1N6491US	5.6	45.0	5	600	1.0	0.5	2.0	255	.40	2.5
1N4460US	6.2	40.0	4	200	1.0	10.0	3.72	230	.35	2.3
1N4461US	6.8	37.0	2.5	200	1.0	5.0	4.08	210	.30	2.1

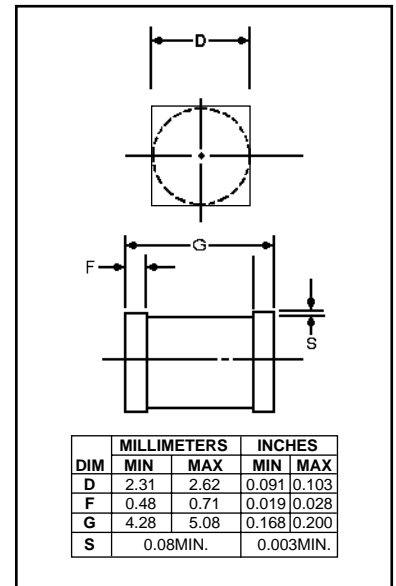


FIGURE 1

DESIGN DATA

CASE: D-5A, hermetically sealed glass case, per MIL-PRF- 19500/406

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: ($R_{\theta JC}$): 20 °C/W maximum at L = 0

THERMAL IMPEDANCE: ($Z_{\theta JX}$): 4.5 °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 + 4PPM / °C. The COE of the Mounting Surface System should be selected to provide a suitable match with this device.

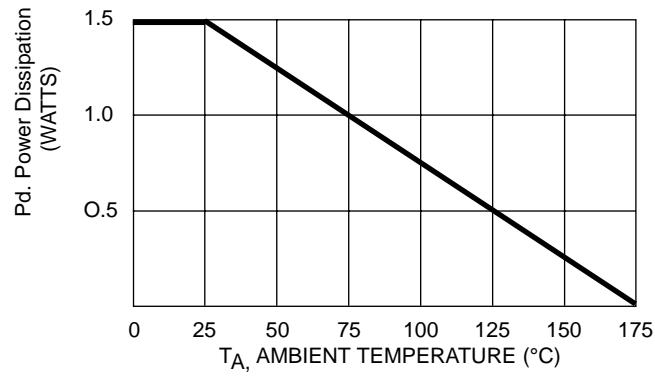


COMPENSATED DEVICES INCORPORATED

22 COREY STREET, MELROSE, MASSACHUSETTS 02176
PHONE (781) 665-1071 FAX (781) 665-7379
WEBSITE: <http://www.cdi-diodes.com> E-mail: mail@cdi-diodes.com

1N6485US thru 1N6491US and 1N4460US and 1N4461US

FIGURE 2



POWER DERATING CURVE

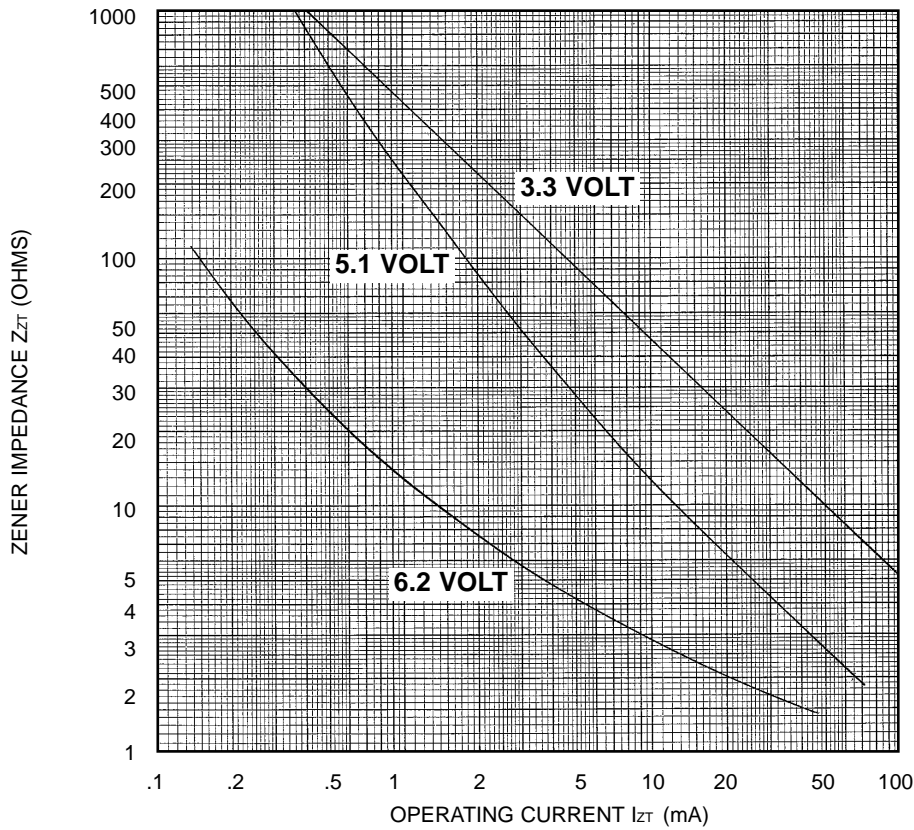


FIGURE 3

ZENER IMPEDANCE VS. OPERATING CURRENT