

- 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) $\Delta V_Z$	MAXIMUM SURGE
	VOLTS	mA	OHMS	OHMS	mA	$\mu\text{A}$	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

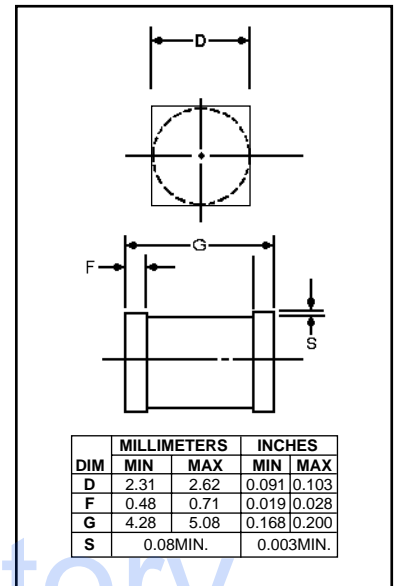


FIGURE 1

### 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.

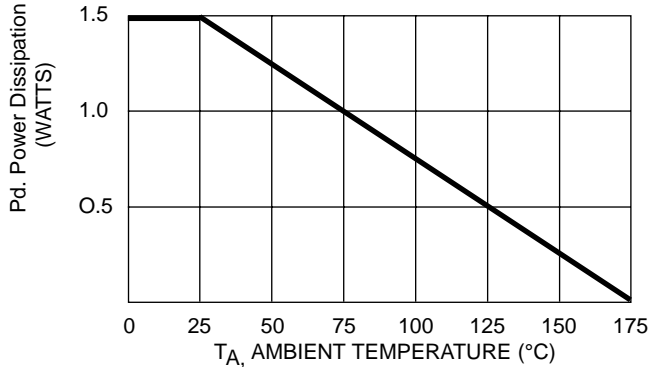


**COMPENSATED DEVICES INCORPORATED**

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](mailto:mail@cdi-diodes.com)

# 1N6485US thru 1N6491US and 1N4460US and 1N4461US

FIGURE 2



POWER DERATING CURVE

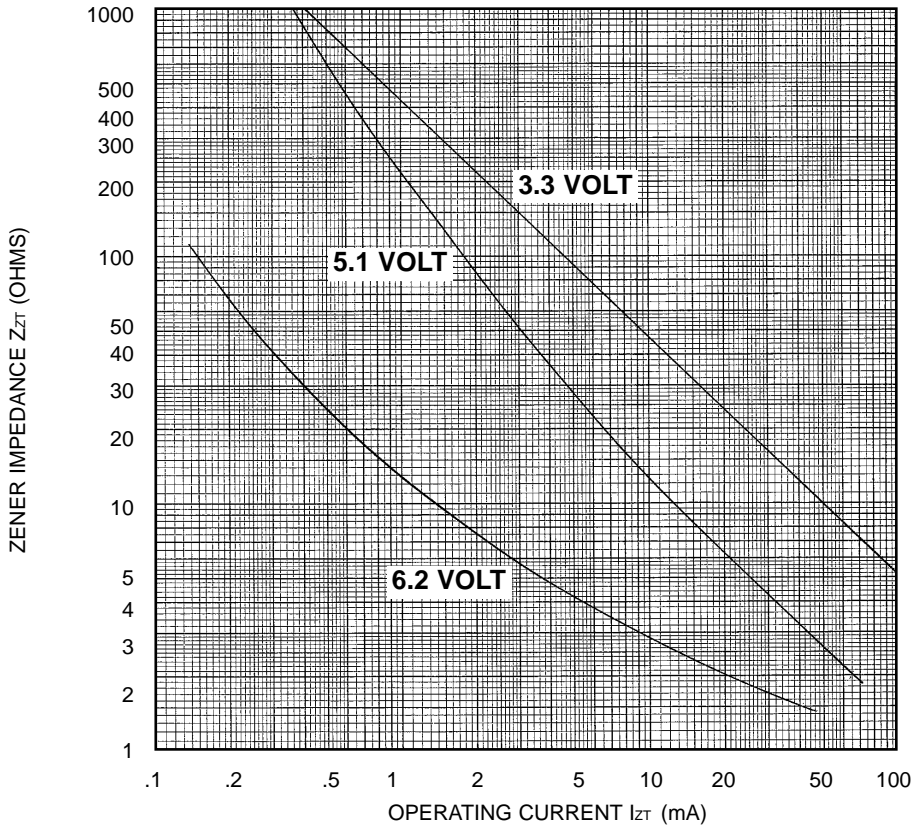


FIGURE 3

ZENER IMPEDANCE VS. OPERATING CURRENT