

- 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	μA	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

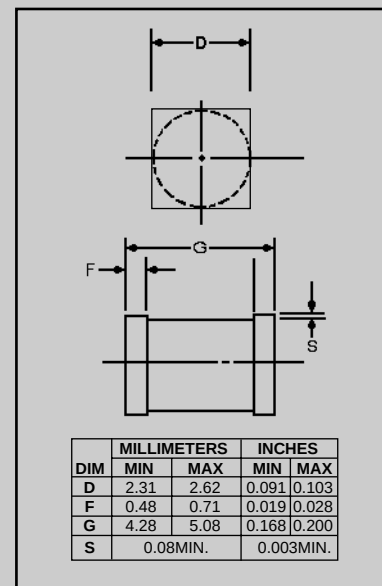


FIGURE 1

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

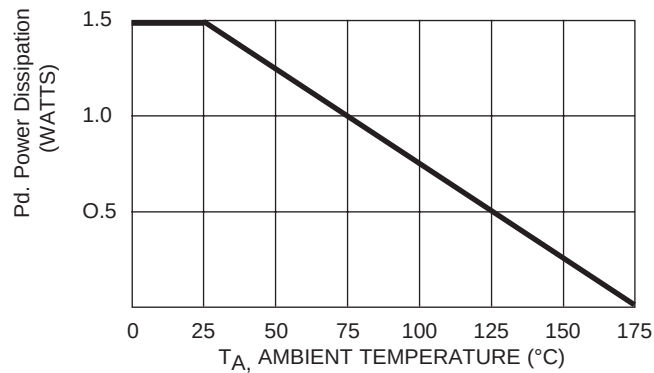
POLARITY: Diode to be operated with the banded (cathode) end positive.

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.



1N6485US thru 1N6491US and 1N4460US and 1N4461US

FIGURE 2



POWER DERATING CURVE

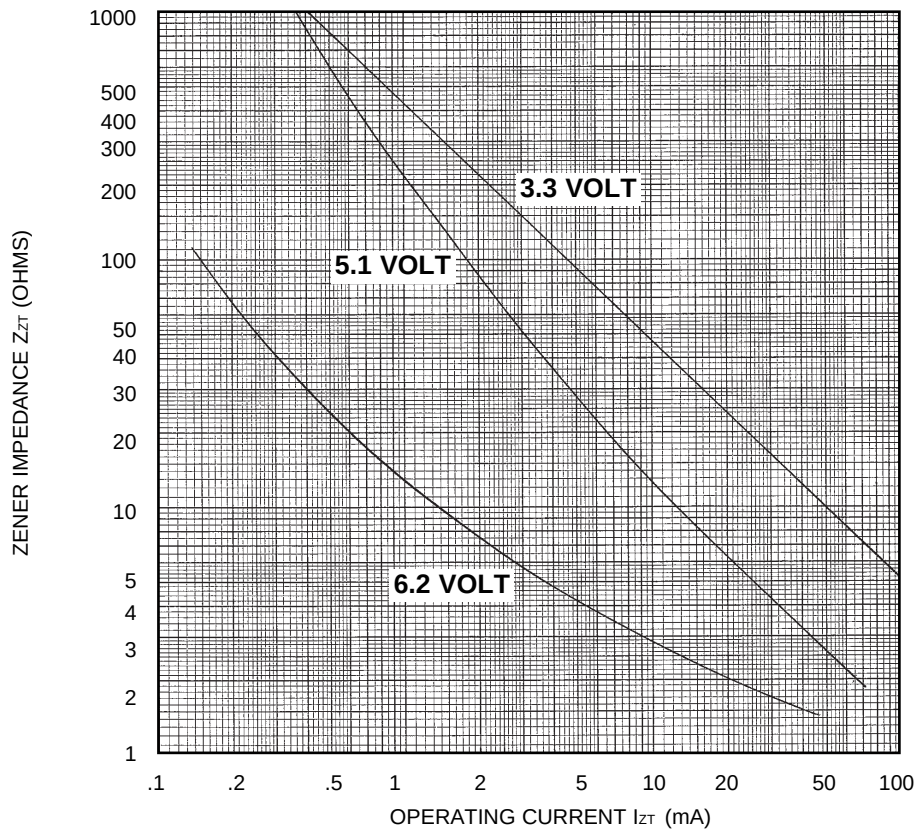


FIGURE 3

ZENER IMPEDANCE VS. OPERATING CURRENT