

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

**1N6485
THRU
1N6491
AND
1N4460
AND
1N4461**

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: 1.0 V 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 $\pm 5\%$ V_Z	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
1N6485	3.3	76.0	10	400	1.0	50	1.0	433	.90	4.2
1N6486	3.6	69.0	10	400	1.0	50	1.0	397	.80	3.9
1N6487	3.9	64.0	9	400	1.0	35	1.0	366	.75	3.6
1N6488	4.3	58.0	9	400	1.0	5.0	1.0	332	.70	3.3
1N6489	4.7	53.0	8	500	1.0	4.0	1.0	304	.60	3.0
1N6490	5.1	49.0	7	500	1.0	1.0	1.0	280	.50	2.7
1N6491	5.6	45.0	5	600	1.0	0.5	2.0	255	.40	2.5
1N4460	6.2	40.0	4	200	1.0	10.0	3.72	230	.35	2.3
1N4461	6.8	37.0	2.5	200	1.0	5.0	4.08	210	.30	2.1

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

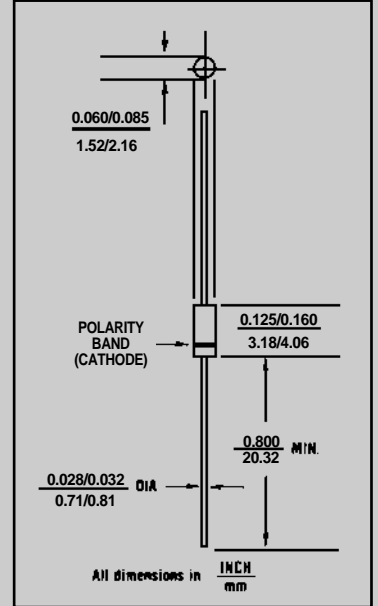


FIGURE 1

DESIGN DATA

CASE: Hermetically sealed, Glass "A"
 Body per MIL-PRF- 19500/406
 D-5A

LEAD MATERIAL: Copper clad steel

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: ($R_{\theta JL}$): 42
 $^\circ\text{C}/\text{W}$ maximum at $L = .375$

THERMAL IMPEDANCE: ($Z_{\theta JX}$): 4.5
 $^\circ\text{C}/\text{W}$ maximum

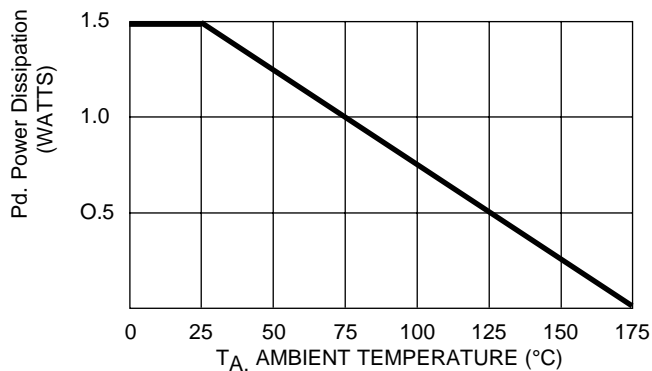
POLARITY: Diode to be operated with the banded (cathode) end positive.

MOUNTING POSITION: Any



1N6485 thru 1N6491 and 1N4460 and 1N4461

FIGURE 2



POWER DERATING CURVE

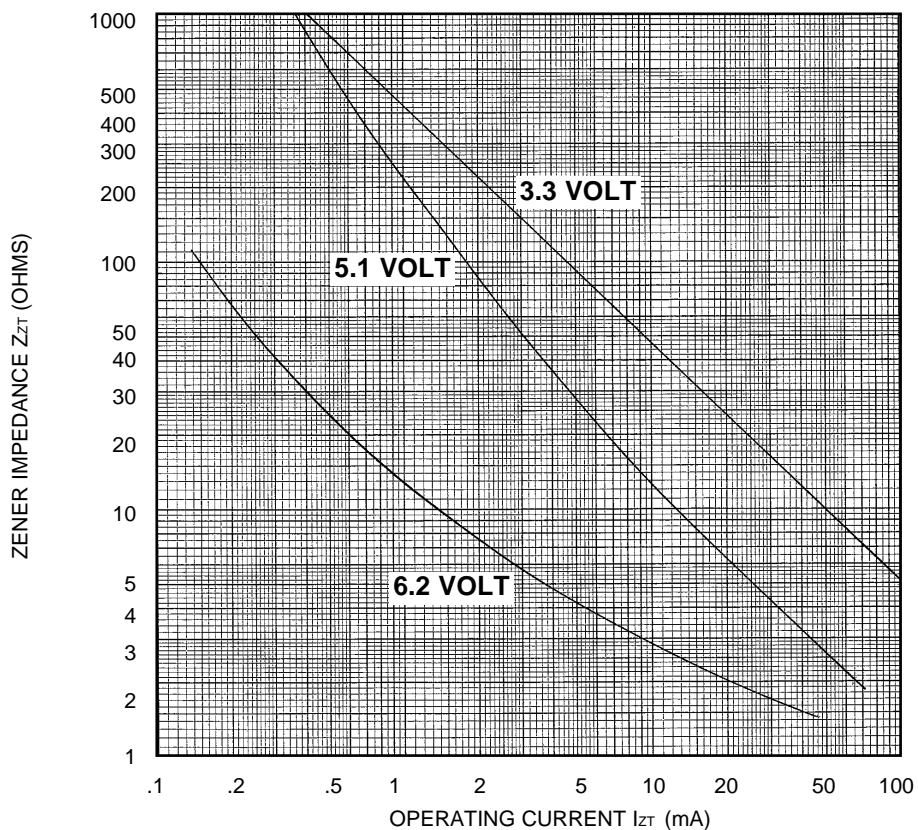


FIGURE 3

ZENER IMPEDANCE VS. OPERATING CURRENT