- 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 Dissapation: 1.5W @ T_A=+25°C
Power Derating: 10mW/°C above T_A=+25°C
Forward Voltage: 1.0 V dc @ I_F=200mA dc
1.5 V dc @ I_F=1A dc

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified

TYPE	ZENER VOLTAGE ±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°C ± 3°C.

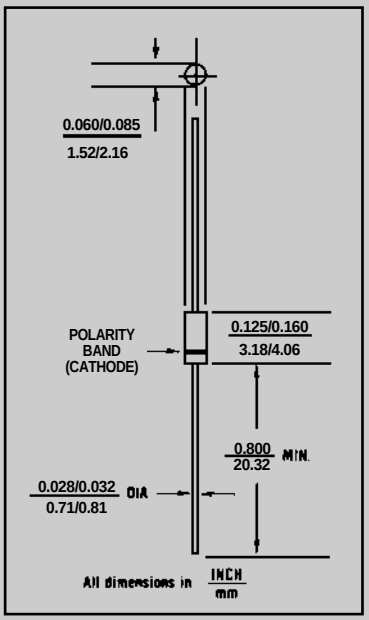


FIGURE 1

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 °C/W maximum at L = .375

THERMAL IMPEDANCE: ($Z_{\Theta JX}$): 4.5 °C/W maximum

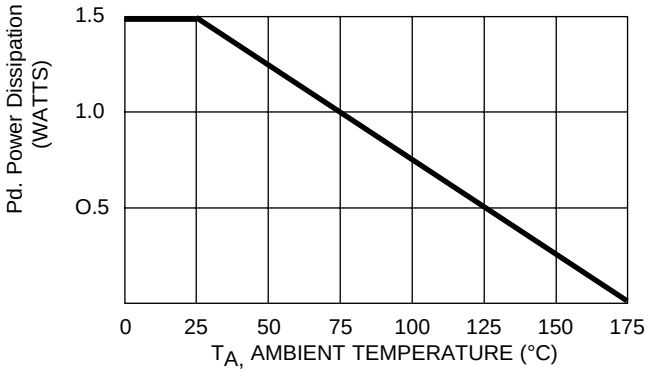
POLARITY: Diode to be operated with the banded (cathode) end positive.

MOUNTING POSITION: Any

Microsemi

6 LAKE STREET, LAWRENCE, MASSACHUSETTS 01841
PHONE (978) 620-2600 FAX (781) 689-0803
WEBSITE: http://www.microsemi.com

FIGURE 2



POWER DERATING CURVE

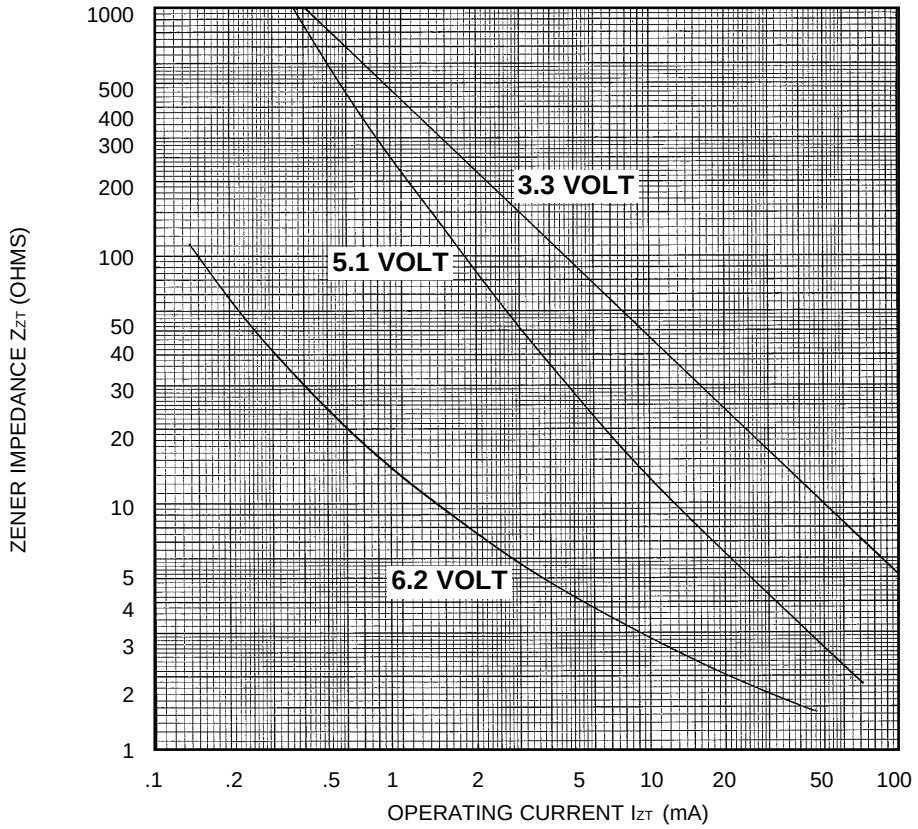


FIGURE 3

ZENER IMPEDANCE VS. OPERATING CURRENT