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

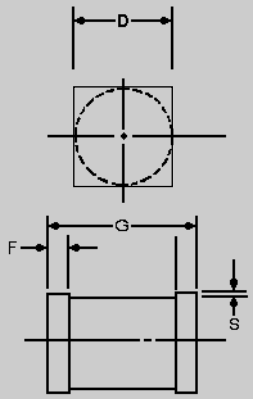
1N6485US THRU 1N6491US AND 1N4460US AND 1N4461US

MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C
Storage Temperature: -65°C to +200°C
Power Dissapation: 1.5W @ T_A=+25°C
Power Derating: 10mW/°C above T_A=+25°C
Forward Voltage: 1.0V dc @ I_F=200mA dc
1.5 V dc @ I_F=1A 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}	$V_{Z\ (REG)}$ $\triangle V_Z$	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



DIM	MILLIMETERS MIN	MILLIMETERS MAX	INCHES MIN	INCHES MAX
D	2.31	2.62	0.091	0.103
F	0.48	0.71	0.019	0.028
G	4.28	5.08	0.168	0.200
S	0.08MIN.		0.003MIN.	

FIGURE 1

DESIGN DATA

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

LEAD FINISH: Tin / Lead

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

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

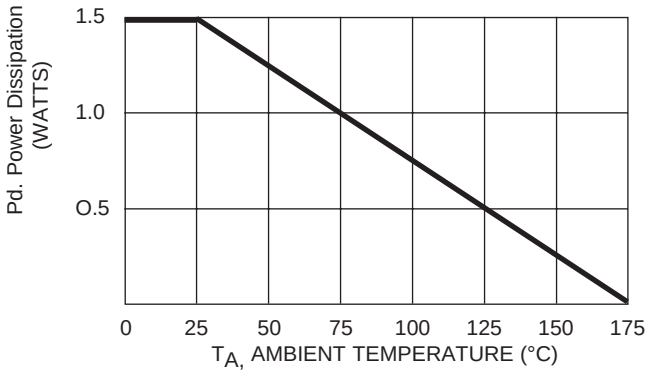
POLARITY: Diode to be operated with the banded (cathode) end positive.

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.

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

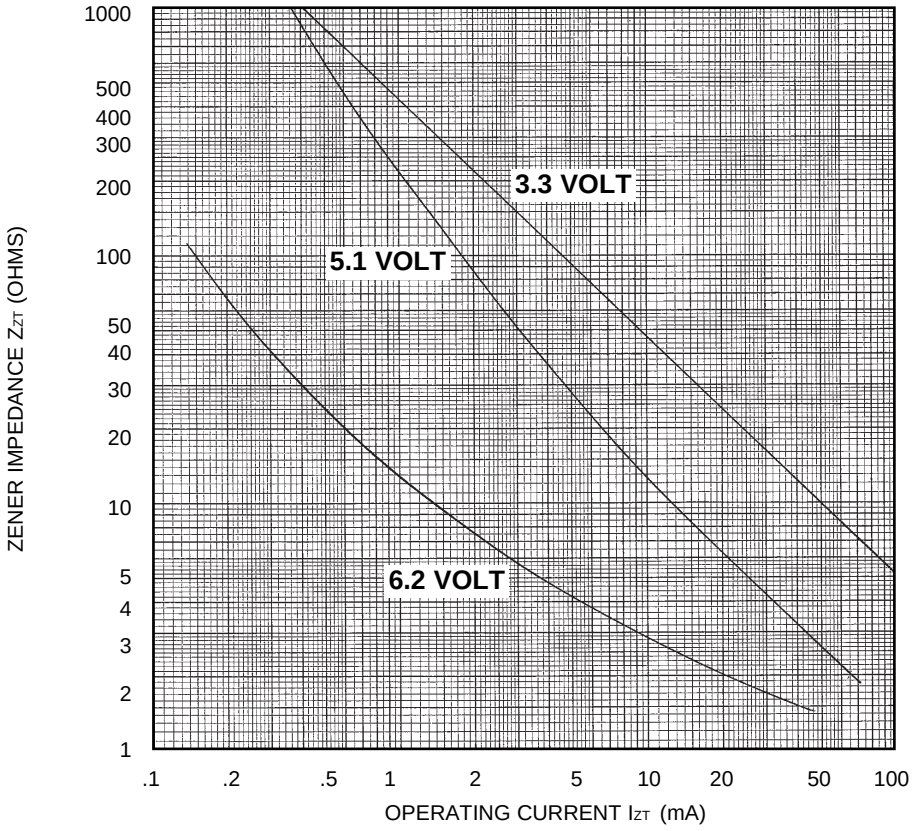


FIGURE 3

ZENER IMPEDANCE VS. OPERATING CURRENT