

- AVAILABLE IN JAN, JANTX, JANTXV, AND JANS  
PER MIL-PRF-19500/356
- 5 WATT ZENER DIODES
- NON CAVITY CONSTRUCTION
- METALLURGICALLY BONDED

**1N6632  
THRU  
1N6637  
AND  
1N5968  
AND  
1N5969**

## MAXIMUM RATINGS

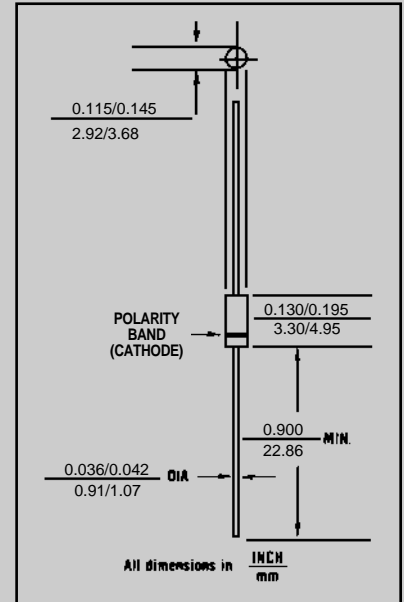
Operating Temperature: -65°C to +175°C  
 Storage Temperature: -65°C to +175°C  
 Power Dissipation: 5W @  $T_L=+25^\circ\text{C}$ ,  $L=3/8"$   
 Power Derating: 33mW/°C above  $T_L=+25^\circ\text{C}$ ,  $L=3/8"$   
 Forward Voltage: 1.5 V dc @  $I_F=1\text{A}$  dc

## ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified

TYPE	NOMINAL ZENER VOLTAGE $V_Z@I_{ZT}$ $\pm 5\%$	TEST CURRENT $I_{ZT}$	MAXIMUM ZENER IMPEDANCE		REGULATION $\Delta V_Z$	MAXIMUM REVERSE LEAKAGE CURRENT VOLTAGE		SURGE CURRENT $I_{ZSM}$
			$Z_Z@I_{ZT}$	$Z_{ZK}(1)$ @ $I_{ZK}=5\text{mA}$		$I_R$	$V_R$	
	VOLTS	mA	OHMS	OHMS	VOLTS	$\mu\text{A}$	VOLTS	AMPS
1N6632	3.3	380	3.0	500	0.90	300	1.0	20.0
1N6633	3.6	350	2.5	500	0.80	250	1.0	18.7
1N6634	3.9	320	2.0	500	0.75	175	1.0	17.6
1N6635	4.3	290	2.0	500	0.70	25	1.0	16.4
1N6636	4.7	260	2.0	450	0.60	20	1.0	15.3
1N6637	5.1	240	1.5	400	0.50	5	1.0	14.4
1N5968	5.6	220	1.0	400	0.4	5000	4.28	20
1N5969	6.2	220	1.0	1000	0.5	1000	4.74	20

**NOTE 1**  $I_{ZK}=1.0$  mA for 1N5969

**NOTE 2** Zener voltage is measured using the pulse method, 0.2mSec to 200mSec at  $I_{ZT}$ , with the diode junction stabilized at  $25^\circ\text{C} \pm 3^\circ\text{C}$  prior to the pulse.



**FIGURE 1**

## DESIGN DATA

**CASE:** Hermetically sealed, Glass "B"  
 Body per MIL-PRF- 19500/356  
 D-5B

**LEAD MATERIAL:** Copper clad steel

**LEAD FINISH:** Tin / Lead

**THERMAL RESISTANCE:** ( $R_{\theta JEC}$ ): 30  
 $^\circ\text{C}/\text{W}$  maximum

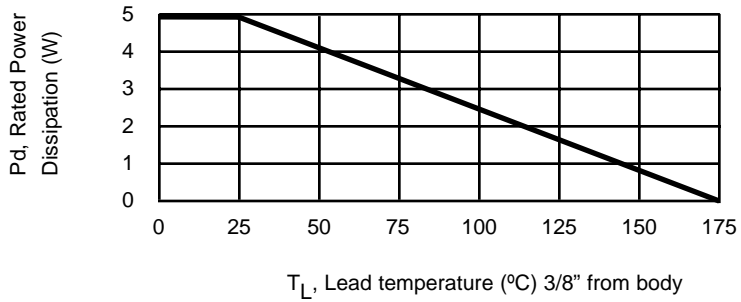
**THERMAL IMPEDANCE:** ( $Z_{\theta JX}$ ): 3  
 $^\circ\text{C}/\text{W}$  maximum

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

**MOUNTING POSITION:** Any



# IN6632 thru IN6637 and IN5968 and IN5969



## POWER DERATING CURVE

FIGURE 2

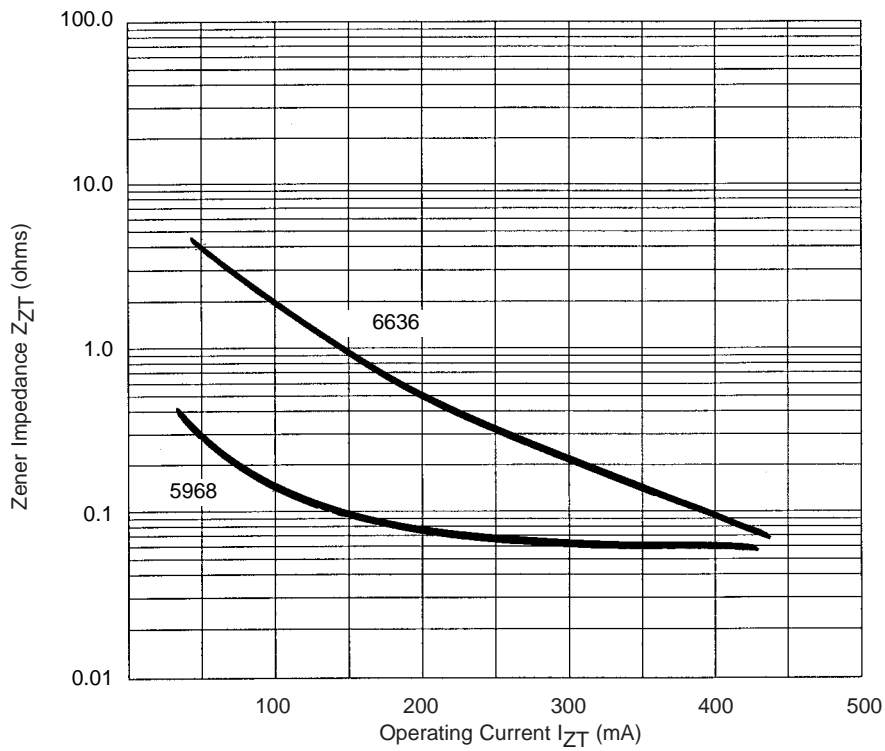


FIGURE 3

Zener Impedance vs. Operating Current