

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

1N6632US  
THRU  
1N6637US  
AND  
1N5968US  
AND  
1N5969US

### MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C  
Storage Temperature: -65°C to +175°C  
Power Dissipation: 5W @  $T_{EC}=+125^{\circ}\text{C}$   
Power Derating: 100mW/°C above  $T_{EC}=+125^{\circ}\text{C}$   
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 $I_{ZSM}$
			$Z_Z @ I_{ZT}$	$Z_{ZK}(1)$ @ $I_{ZK}=5\text{mA}$		$I_R$	$V_R$	
1N6632US	3.3	380	3.0	500	0.90	300	1.0	20.0
1N6633US	3.6	350	2.5	500	0.80	250	1.0	18.7
1N6634US	3.9	320	2.0	500	0.75	175	1.0	17.6
1N6635US	4.3	290	2.0	500	0.70	25	1.0	16.4
1N6636US	4.7	260	2.0	450	0.60	20	1.0	15.3
1N6637US	5.1	240	1.5	400	0.50	5	1.0	14.4
1N5968US	5.6	220	1.0	400	0.4	5000	4.28	20
1N5969US	6.2	220	1.0	1000	0.5	1000	4.74	20

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

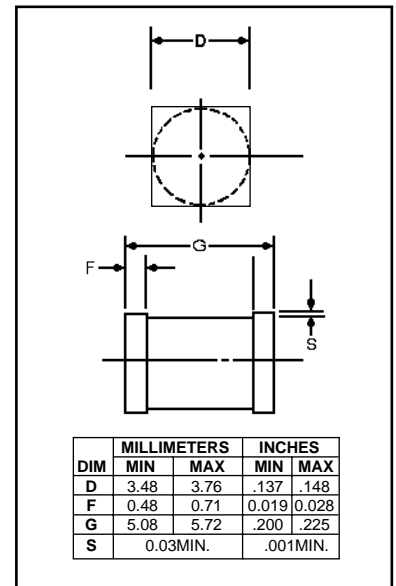


FIGURE 1

### DESIGN DATA

**CASE:** D-5B, Hermetically sealed glass case, PER MIL-PRF 19500/356

**LEAD FINISH:** Tin / Lead

**THERMAL RESISTANCE:** ( $R_{\theta JEC}$ ):  
10 °C/W maximum at L = 0

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

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

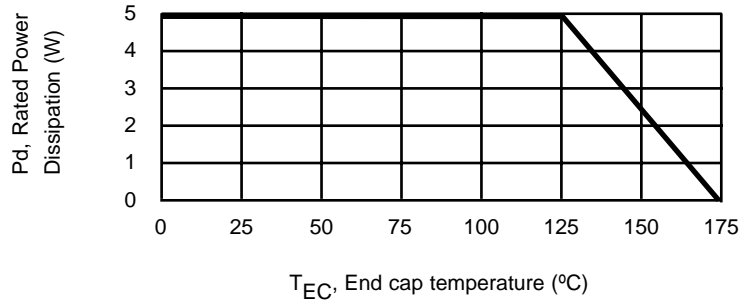
**MOUNTING SURFACE SELECTION:**  
The Axial Coefficient of Expansion (COE) of this device is approximately + 4PPM / °C. The COE of the Mounting Surface System should be selected to provide a suitable match with this device.



**COMPENSATED DEVICES INCORPORATED**

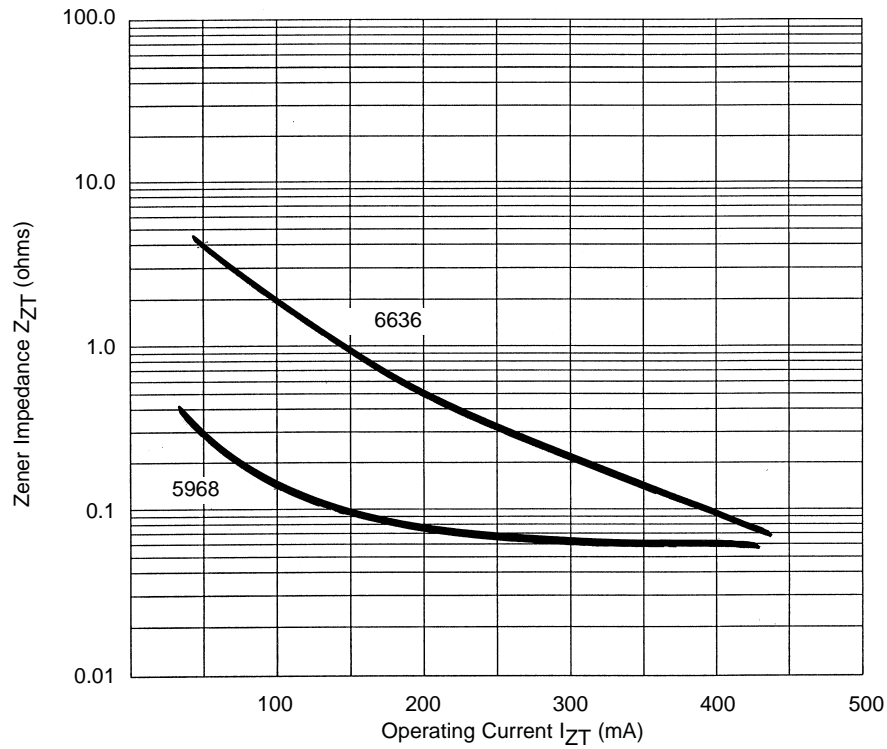
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# IN6632US thru IN6637US and IN5968US and IN5969US



**POWER DERATING CURVE**

**FIGURE 2**



**FIGURE 3**

Zener Impedance vs. Operating Current