

- 1N6639 thru 1N6641 AVAILABLE IN JAN, JANTX, JANTXV, AND JANS PER MIL-PRF-19500/609
- SWITCHING DIODES
- NON-CAVITY GLASS PACKAGE
- METALLURGICALLY BONDED

1N6639

1N6640

1N6641

### MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C  
 Storage Temperature: -65°C to +175°C  
 Operating Current: 300 mA  
 Derating: 3 mA/°C Above  $T_L = +75^\circ\text{C}$  @  $L = 3/8"$   
 Surge Current:  $I_{FSM} = 2.5\text{A}$ ,  $P_w = 8.3\text{ms}$

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

TYPES	$V_{BRR}$ @ 10 $\mu\text{A}$	$V_{RWM}$	$I_{R1}$ @ $T_A = +25^\circ\text{C}$ $V_R = V_{RWM}$	$I_{R2}$ @ $T_A = +150^\circ\text{C}$ $V_R = V_{RWM}$	$T_{FR}$ $I_F = 200\text{ mA}$	$T_{RR}$	$C_T$ $V_R = 0$
	$V_{(PK)}$ MIN	$V_{(PK)}$	nA dc	$\mu\text{A}$ dc	ns	ns	pF
1N6639	100	75	100	100	10	4.0	2.5
1N6640	75	50	100	100	10	4.0	2.5
1N6641	75	50	100	100	10	5.0	3.0

### FORWARD VOLTAGE:

TYPES	$V_F$ @ $I_F$		mA (PULSED)
	V dC		
	MIN	MAX	
1N6639	-	1.20	500
1N6640	0.54	0.62	1
	0.76	0.86	50
	0.82	0.92	100
	0.87	1.00	200
1N6641	-	1.10	200

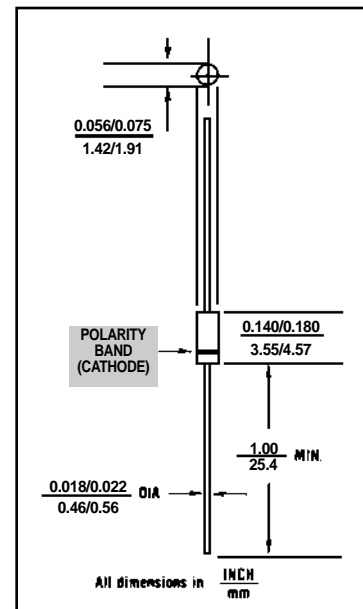


FIGURE 1

### DESIGN DATA

**CASE:** Hermetically sealed, "D" Body per MIL-PRF- 19500/609. D-5D

**LEAD MATERIAL:** Copper clad steel

**LEAD FINISH:** Tin / Lead

**THERMAL RESISTANCE:** ( $R_{\theta JL}$ ): 160 °C/W maximum at  $L = .375$

**THERMAL IMPEDANCE:** ( $Z_{\theta JX}$ ): 25 °C/W maximum

**POLARITY:** Cathode end is banded.

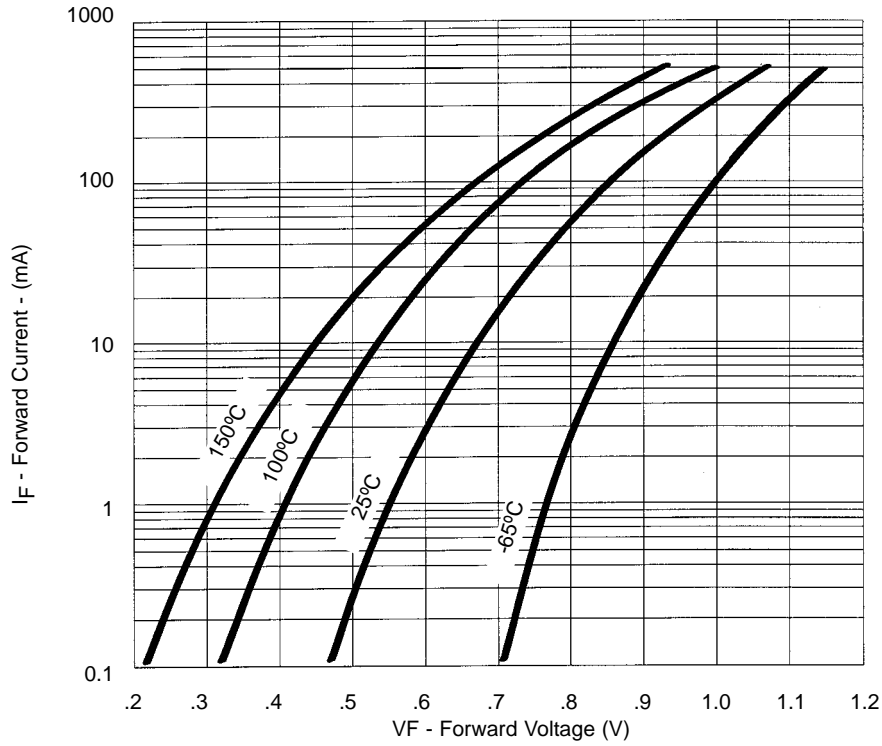
**MOUNTING POSITION:** Any



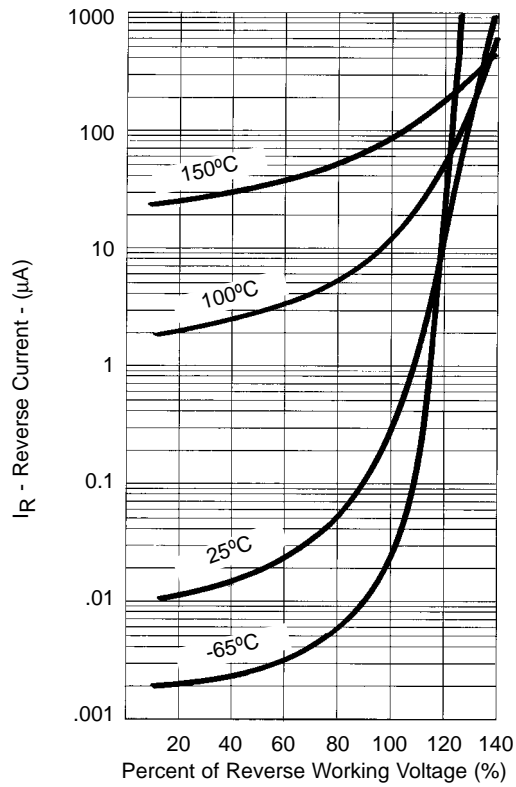
## COMPENSATED DEVICES INCORPORATED

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# IN6639 thru IN6641



**FIGURE 2**  
Typical Forward Current  
vs Forward Voltage



**FIGURE 3**  
Typical Reverse Current  
vs Reverse Voltage

**NOTE :** All temperatures shown on graphs are junction temperatures