

- AVAILABLE IN JAN, JANTX, AND JANTXV  
PER MIL-PRF-19500/240
- SILICON RECTIFIER
- METALLURGICALLY BONDED

1N645-1

### MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C  
 Storage Temperature: -65°C to +175°C  
 Operating Current: 400 mA @ 25°C  
                           150 mA @ 150°C  
 Derating: 2.0 mA/°C From 25°C to 150°C  
               6.0 mA/°C From 150°C to 175°C

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

TYPE	V <sub>RSM</sub>	V <sub>RWM</sub>	I <sub>FSM</sub> T <sub>P</sub> = 1/120 s T <sub>A</sub> = 25°C	V <sub>F</sub> @400mA	CAP @ V <sub>R</sub> = 4V
	V (pk)	V (pk)	A	V <sub>DC</sub>	pF
1N645-1	270	225	5	0.8 - 1.0	20

TYPE	I <sub>R1</sub> at V <sub>RWM</sub> T <sub>A</sub> = 25°C	I <sub>R2</sub> at V <sub>RWM</sub> T <sub>A</sub> = 150°C	I <sub>R3</sub> at V <sub>RSM</sub> T <sub>A</sub> = 25°C
	μA	μA	μA
1N645-1	0.05	25	50

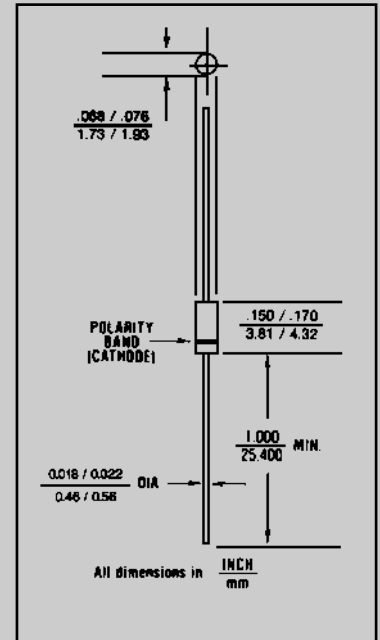


FIGURE 1

### DESIGN DATA

**CASE:** Hermetically sealed glass case. DO – 35 outline.

**LEAD MATERIAL:** Copper clad steel.

**LEAD FINISH:** Tin / Lead

**THERMAL RESISTANCE:** (R<sub>ΘJEC</sub>): 250 °C/W maximum

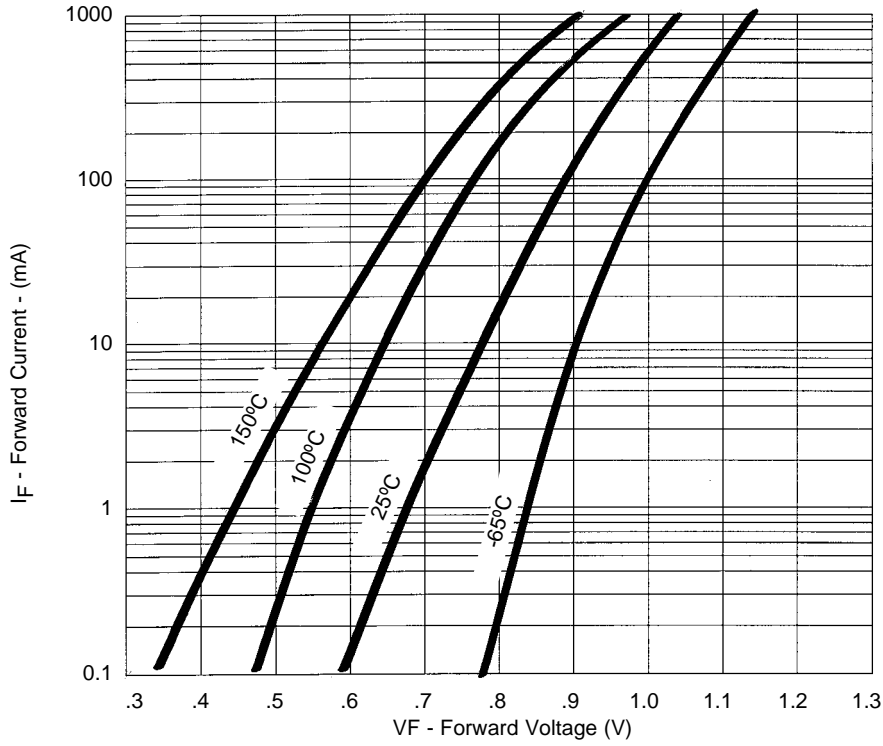
**THERMAL IMPEDANCE:** (Z<sub>ΘJX</sub>): 35 °C/W maximum

**POLARITY:** Cathode end is banded.

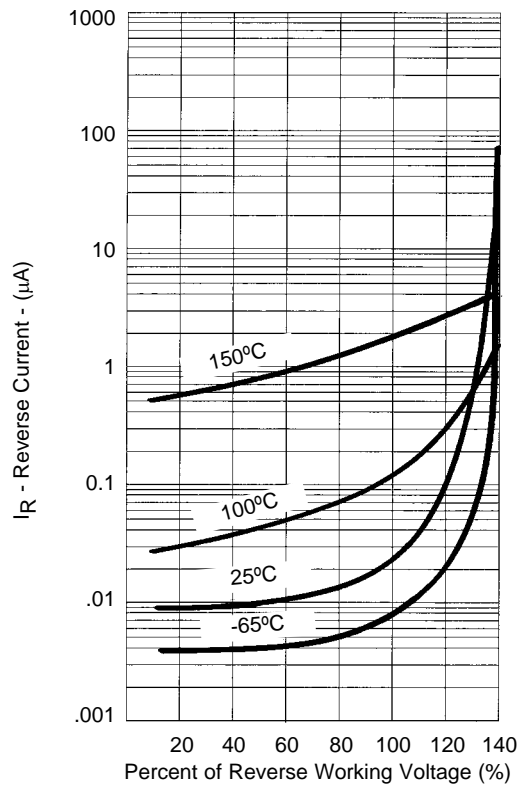
**MOUNTING POSITION:** ANY.



# IN645-1



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



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

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