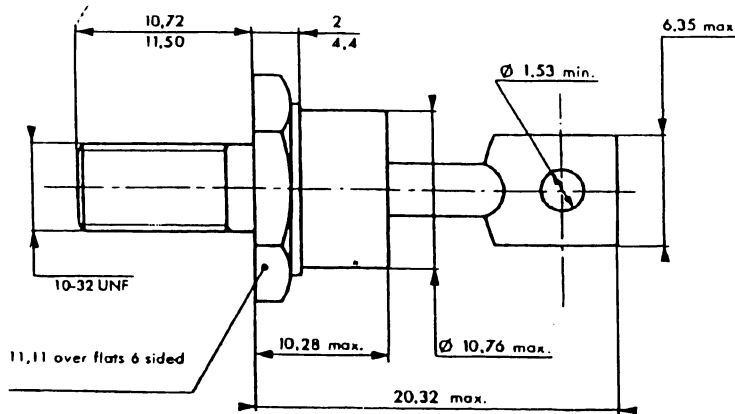




# SOLID STATE INC.

46 FARRAND STREET  
BLOOMFIELD, NEW JERSEY 07003

www.solidstateinc.com



D04

|          | JEDEC Numbers |        | Peak Reverse Voltage |
|----------|---------------|--------|----------------------|
| 1N2246,A | 1N2598        |        | 50V                  |
| 1N2248,A |               |        | 100V                 |
|          |               |        | 150V                 |
| 1N2250,A | 1N2784        | 1N4506 | 200V                 |
| 1N2252,A |               |        | 300V                 |
| 1N2254,A | 1N2785        | 1N4507 | 400V                 |
| 1N2256,A |               |        | 500V                 |
| 1N2258,A |               | 1N4508 | 600V                 |
|          | 1N3670,A      |        | 700V                 |
| 1N2260,A | 1N3671,A      | 1N4509 | 800V                 |
|          | 1N3672,A      |        | 900V                 |
| 1N2262,A | 1N3673, A     | 1N4510 | 1000V                |
| 1N2264,A |               | 1N4511 | 1200V                |
|          | 1N5331,A      |        | 1400V                |
|          |               |        | 1600V                |

For 1N types, use an R suffix for Reverse Polarity

- Low Forward Voltage
- 250A Surge Rating
- Glass to metal seal construction
- $V_{RRM}$  to 1600V

| Electrical Characteristics          |                     |  |
|-------------------------------------|---------------------|--|
| Average forward current             | $I_F(AV)$ 22 Amps   | $T_C = 134^\circ C$ , half sine wave, $R_{\theta JC} = 2.5^\circ C/W$<br>8.3ms, half sine, $T_J = 200^\circ C$ |
| Maximum surge current               | $I_{FSM}$ 250 Amps  |  |
| Max $I^2 t$ for fusing              | $I^2 t$ 260 $A^2 s$ | $I_{FM} = 30A; T_J = 25^\circ C^*$<br>$V_{RRM, T_J = 25^\circ C}$<br>$V_{RRM, T_J = 150^\circ C}$              |
| Max peak forward voltage            | $V_{FM}$ 1.2 Volts  |  |
| Max peak reverse current            | $I_{RM}$ 10 $\mu A$ |  |
| Max peak reverse current            | $I_{RM}$ 1.0 mA     |  |
| Max Recommended Operating Frequency | 10kHz               |  |

\*Pulse test: Pulse width 300  $\mu sec$ . Duty cycle 2%

| Thermal and Mechanical Characteristics |                 |                                  |
|--|-----------------|----------------------------------|
| Storage temperature range              | $T_{STG}$       | $-65^\circ C$ to $200^\circ C$   |
| Operating junction temp range          | $T_J$           | $-65^\circ C$ to $200^\circ C$   |
| Maximum thermal resistance             | $R_{\theta JC}$ | $2.5^\circ C/W$ Junction to Case |
| Mounting torque                        |                 | 25-30 inch pounds                |
| Weight                                 |                 | .16 ounces (5.0 grams) typical   |

Figure 1  
Maximum Forward Characteristics

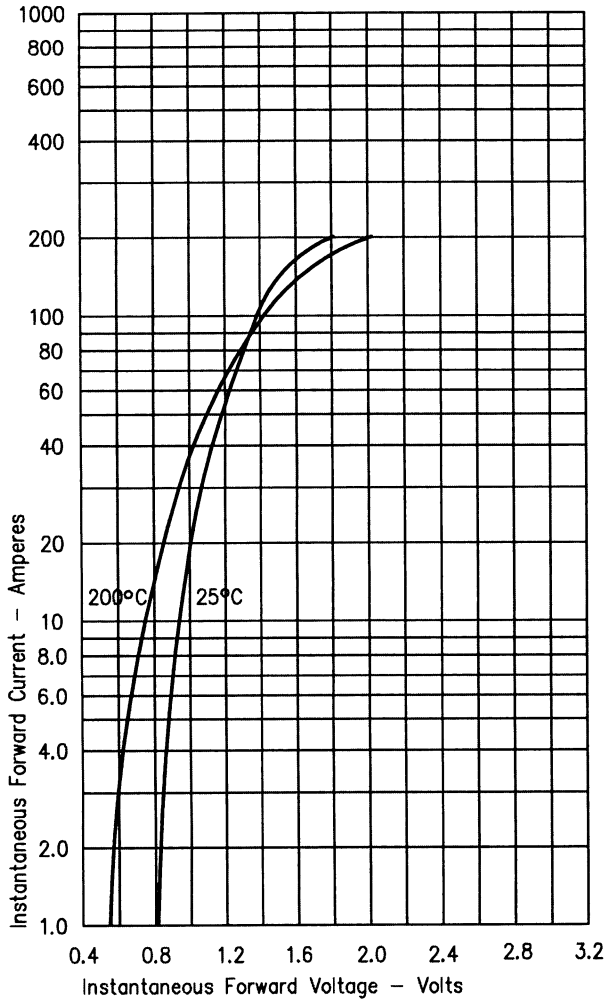


Figure 3  
Forward Current Derating

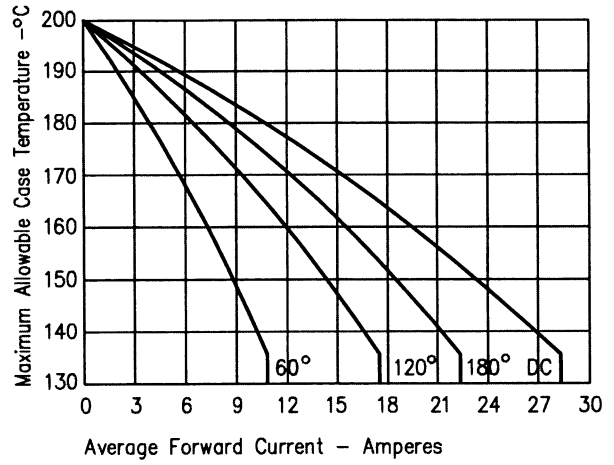


Figure 4  
Maximum Forward Power Dissipation

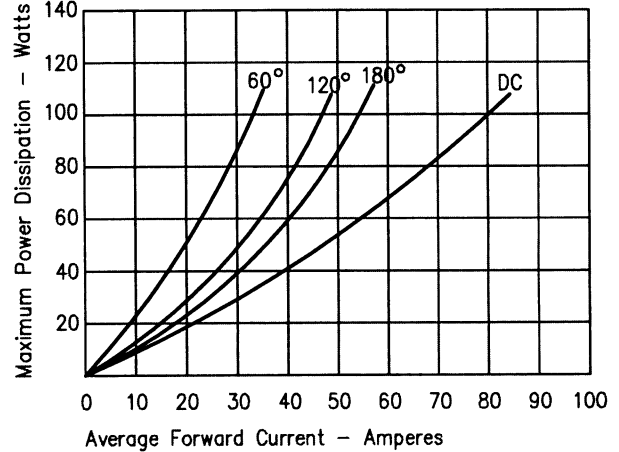


Figure 2  
Typical Reverse Characteristics

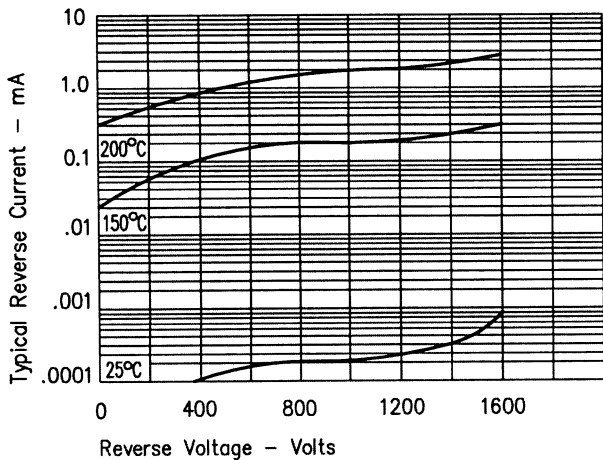


Figure 5  
Transient Thermal Impedance

