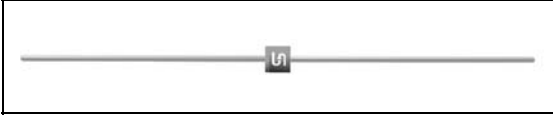




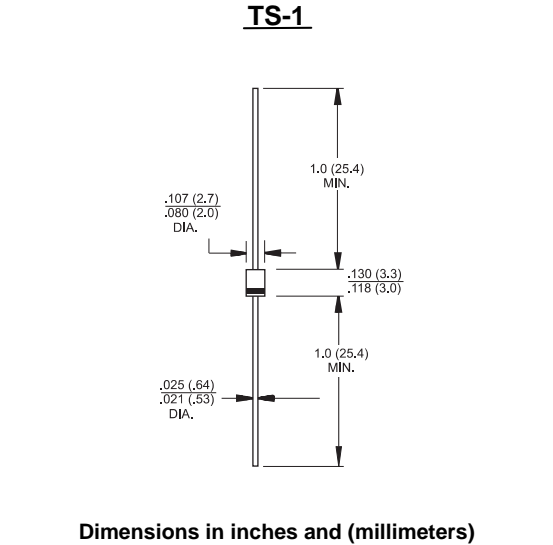
1T1G THRU 1T7G

1.0 AMP. Glass Passivated Rectifiers



Voltage Range
50 to 1000 Volts
Current
1.0 Ampere

- Features**
- ✧ Low forward voltage drop
 - ✧ High current capability
 - ✧ High reliability
 - ✧ High surge current capability
 - ✧ 3mm miniature body
- Mechanical Data**
- ✧ Cases: Molded plastic
 - ✧ Epoxy: UL 94V-0 rate flame retardant
 - ✧ Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
 - ✧ Polarity: Color band denotes cathode end
 - ✧ High temperature soldering guaranteed: 260°C/10 seconds/.375" (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
 - ✧ Weight: 0.20 gram



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

| Type Number | Symbol | 1T1G | 1T2G | 1T3G | 1T4G | 1T5G | 1T6G | 1T7G | Units |
|--|-----------------|-------------|------|------|------|------|--------------|------|------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @ $T_A = 50^\circ C$ | $I_{(AV)}$ | 1.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 30 | | | | | | | A |
| Maximum Instantaneous Forward Voltage @ 1.0A | V_F | 1.1 | 1.0 | | | | | V | |
| Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=125^\circ C$ | I_R | 5.0 | | | | | 100 | uA | |
| Typical Junction Capacitance (Note 1) | C_j | 10 | | | | | pF | | |
| Typical Thermal Resistance (Note 2) | $R_{\theta JA}$ | 100 | | | | | $^\circ C/W$ | | |
| Operating Temperature Range | T_J | -65 to +150 | | | | | | | $^\circ C$ |
| Storage Temperature Range | T_{STG} | -65 to +150 | | | | | | | $^\circ C$ |

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.
 2. Mount on Cu-Pad Size 5mm x 5mm on P.C.B.

RATINGS AND CHARACTERISTIC CURVES (1T1G THRU 1T7G)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

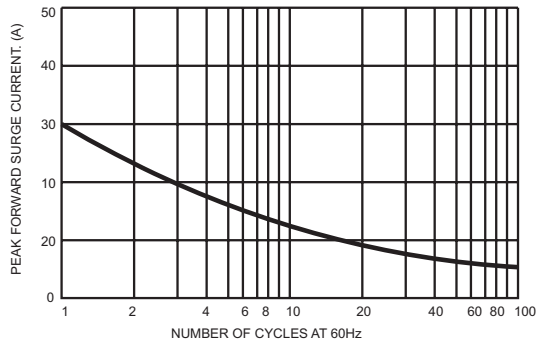


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

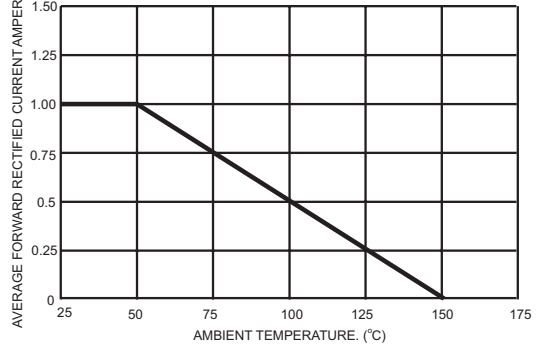


FIG.3- TYPICAL JUNCTION CAPACITANCE

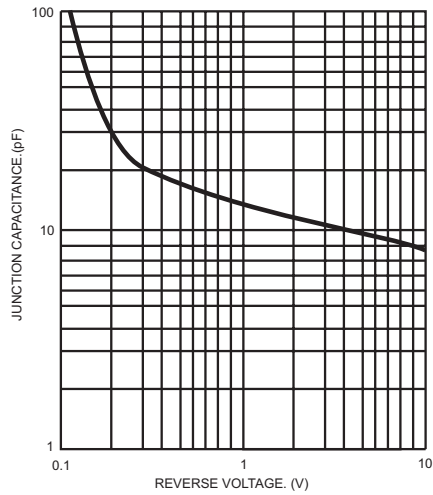


FIG.4- TYPICAL FORWARD CHARACTERISTICS

