



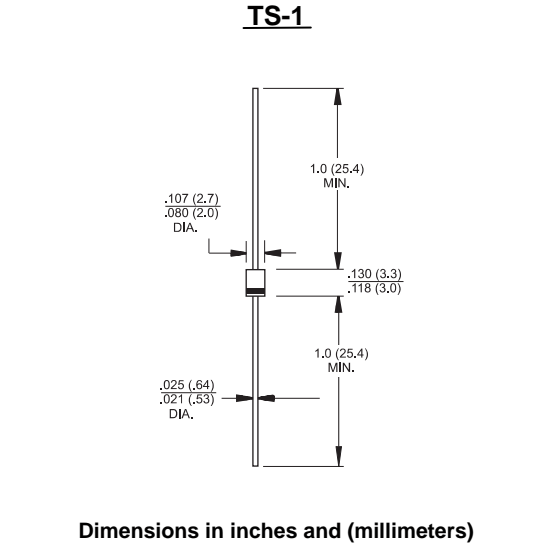
# 1T1G THRU 1T7G

## 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

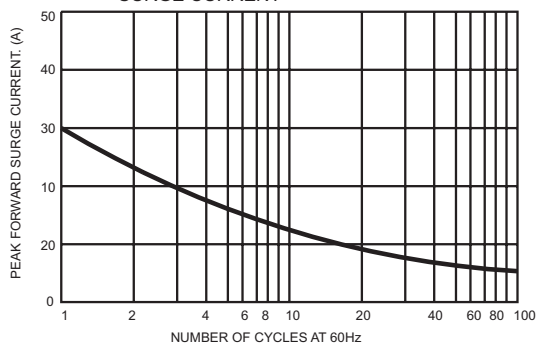
Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

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 uA
Typical Junction Capacitance (Note 1)	$C_j$	10							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	100							°C/W
Operating Temperature Range	$T_J$	-65 to +150							°C
Storage Temperature Range	$T_{STG}$	-65 to +150							°C

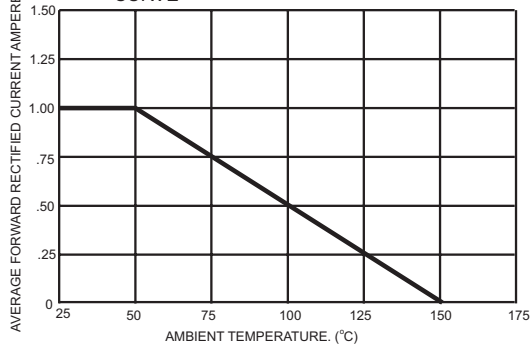
Note: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.  
2. Mount on Cu-Pad Size 5mm x 5mm on P.C.B.

## RATINGS AND CHARACTERISTIC CURVES (1T1G THRU 1T7G)

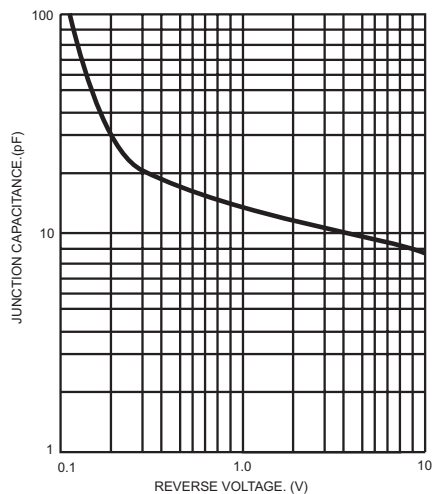
**FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE**



**FIG.3- TYPICAL JUNCTION CAPACITANCE**



**FIG.4- TYPICAL FORWARD CHARACTERISTICS**

