



# HT11G THRU HT18G

## 1.0 AMP. Glass Passivated High Efficient Rectifiers

	Voltage Range 50 to 1000 Volts Current 1.0 Ampere
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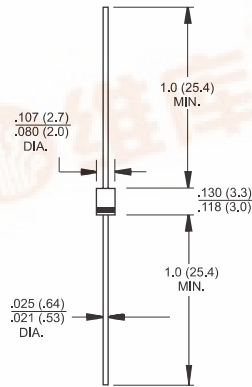
### Features

- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability

### Mechanical Data

- ✧ Case: Molded plastic TS-1
- ✧ Epoxy: UL 94V-O 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
- ✧ Mounting position: Any
- ✧ Weight: 0.20 gram

### TS-1



Dimensions in inches and (millimeters)

### 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	HT 11G	HT 12G	HT 13G	HT 14G	HT 15G	HT 16G	HT 17G	HT 18G	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @ $T_A = 55^\circ C$	$I_{(AV)}$	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	$V_F$	1.0			1.3		1.7			V
Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=125^\circ C$	$I_R$	5.0 150								$\mu A$ $\mu A$
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	50				75				nS
Typical Junction Capacitance (Note 2)	$C_j$	15				10				pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	95								$^{\circ}C/W$
Operating Temperature Range	$T_J$	-65 to +150								$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-65 to +150								$^{\circ}C$

Notes: 1. Reverse Recovery Test Conditions:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$

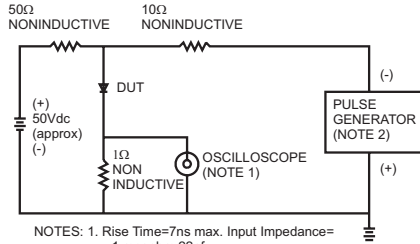
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

3. Mount on cu-Pad Size 5mm x 5mm on PCB.



## RATINGS AND CHARACTERISTIC CURVES (HT11G THRU HT18G)

FIG. 1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time=7ns max. Input Impedance=1 megohm 22pf  
2. Rise Time=10ns max. Source Impedance=50 ohms

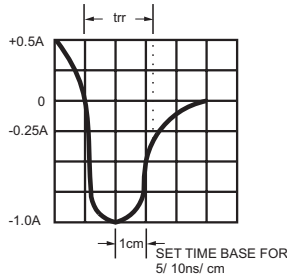


FIG. 2- MAXIMUM FORWARD CURRENT DERATING CURVE

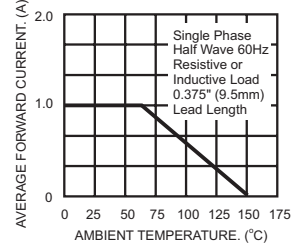


FIG. 3- TYPICAL REVERSE CHARACTERISTICS

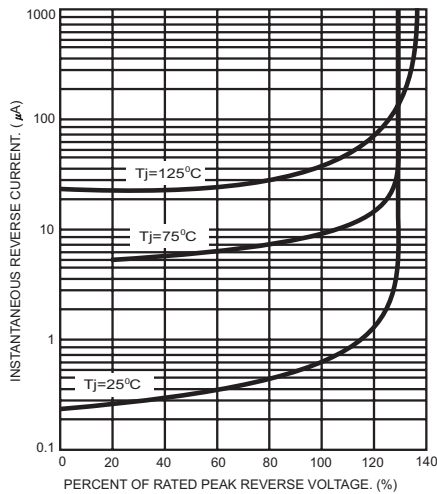


FIG. 4- TYPICAL FORWARD CHARACTERISTICS

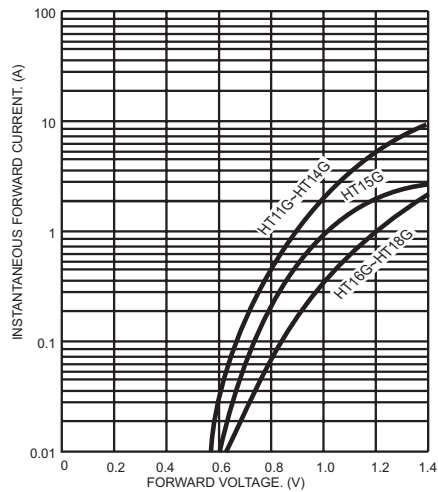


FIG. 5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

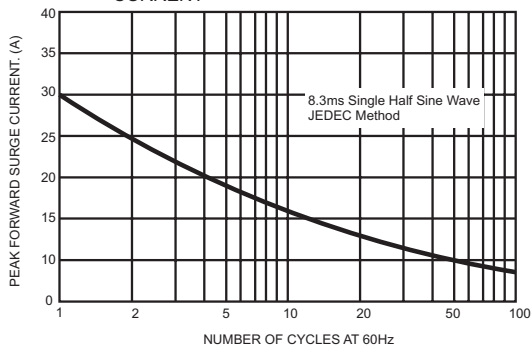


FIG. 6- TYPICAL JUNCTION CAPACITANCE

