

Features

- ◇ High efficiency, Low VF
- ◇ High current capability
- ◇ High reliability
- ◇ High surge current capability
- ◇ For use in low voltage, high frequency inverter, free wheeling, and polarity protection application.
- ◇ Green compound with suffix "G" on packing code & prefix "G" on datecode

Mechanical Data

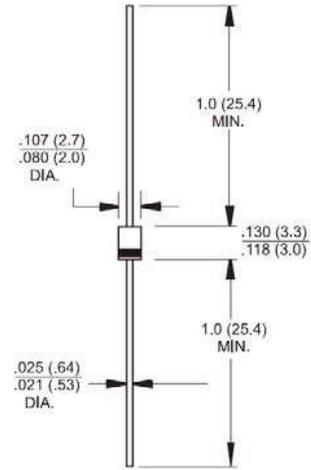
- ◇ Case: Molded plastic TS-1
- ◇ Epoxy: UL 94V-0 rate flame retardant
- ◇ Lead: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- ◇ Polarity: Color band denotes cathode
- ◇ High temperature soldering guaranteed: 260°C /10s / .375", (9.5mm) lead lengths at 5 lbs, (2.3kg) tension
- ◇ Mounting position: Any
- ◇ Weight: 0.20 grams

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	Symbo l	HT 11	HT 12	HT 13	HT 14	HT 15	HT 16	HT 17	HT 18	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°C	I _{F(AV)}	1								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 (Note 1) @ 1 A	V _F	1.0			1.3		1.7			V
Maximum DC Reverse Current at @ T _A =25 °C Rated DC Blocking Voltage @ T _A =125 °C	I _R	5 150								uA
Maximum Reverse Recovery Time (Note 2)	T _{rr}	50				75				nS
Typical Junction Capacitance (Note 3)	C _j	20				15				pF
Typical Thermal Resistance (Note 4)	R _{θJA}	100								°C/W
Operating Temperature Range	T _J	- 65 to + 150								°C
Storage Temperature Range	T _{STG}	- 65 to + 150								°C

- Note 1: Pulse Test with PW=300 usec, 1% Duty Cycle
 Note 2: Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A
 Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.
 Note 4: Mount on Cu-Pad Size 5mm x 5mm on PCB



Dimensions in inches and (millimeters)

Marking Diagram



- HT1X = Specific Device Code
- G = Green Compound
- Y = Year
- M = Work Month

RATINGS AND CHARACTERISTIC CURVES (HT11 THRU HT18)

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

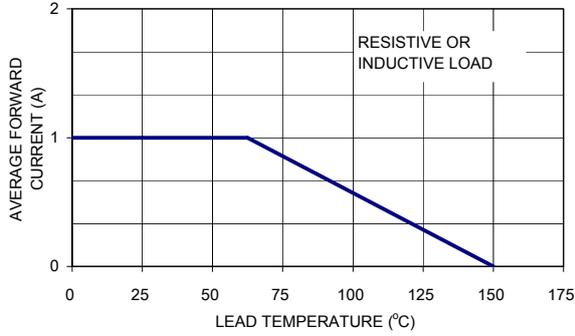


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

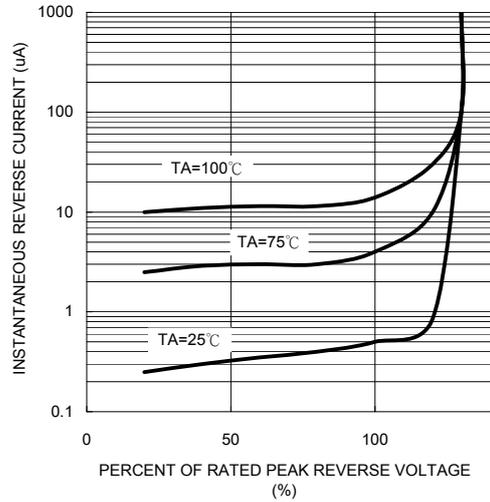


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



FIG. 5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

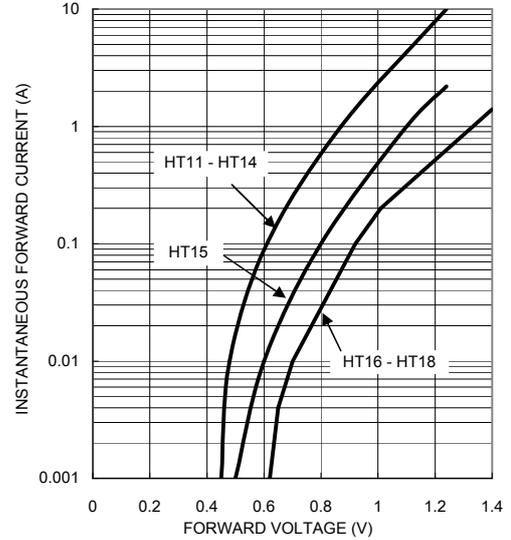


FIG. 4- TYPICAL JUNCTION CAPACITANCE

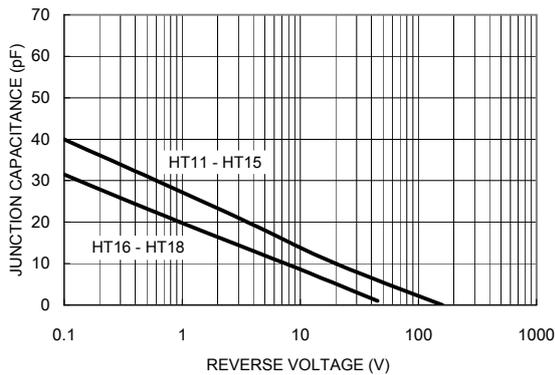


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

