
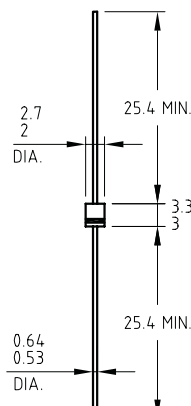


## 1.0 Amp. Glass Passivated Ultrafast Rectifiers

 <b>RoHS</b> COMPLIANCE	<b>DO-41 Mini</b>	<b>Voltage</b> 200 V to 1000 V	<b>Current</b> 1.0 A
		<ul style="list-style-type: none"> <li>Glass passivated chip junction.</li> <li>High efficiency, Low VF</li> <li>High current capability</li> <li>High reliability</li> <li>High surge current capability</li> <li>For use in low voltage, high frequency inverter, free wheeling, and polarity protection application.</li> </ul>	
<b>Dimensions in mm.</b>		<b>MECHANICAL DATA</b> <ul style="list-style-type: none"> <li>Case: Molded plastic</li> <li>Epoxy: UL 94V0 rate flame retardant</li> <li>Lead: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed</li> <li>Polarity: Color band denotes cathode</li> <li>High temperature soldering guaranteed: 260 °C/10 seconds/9.5mm lead lengths at 2.3kg tension</li> <li>Mounting position: Any</li> <li>Weight: 0.20 gram</li> </ul>	

### Maximum Ratings and Electrical Characteristics at 25 °C

		HT13G	HT15G	HT16G	HT17G	HT18G
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage (V)	200	400	600	800	1000
$V_{RMS}$	Maximum RMS Voltage (V)	140	280	420	560	700
$V_{DC}$	Maximum DC Blocking Voltage (V)	200	400	600	800	1000
$I_{F(AV)}$	Maximum Average Forward Rectified Current 9.5mm Lead Length @ $T_A = 55\text{ °C}$	1.0 A				
$I_{FSM}$	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	30 A				
$T_{rr}$	Maximum Reverse Recovery Time from $I_F = 0.5A$ ; $I_R = 1A$ ; $I_{RR} = 0.25A$	50 nS		75 nS		
$C_j$	Typical Junction Capacitance at 1 MHz and reverse voltage of $4V_{DC}$	15 pF		10 pF		
$T_j$	Operating Temperature Range	-65 to +150 °C				
$T_{stg}$	Storage Temperature Range	-65 to +150 °C				

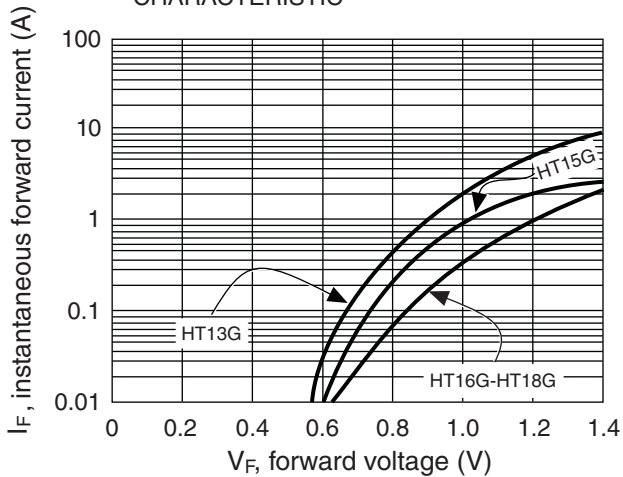
### Electrical Characteristics at $T_{amb} = 25\text{ °C}$

$V_F$	Maximum Instantaneous Forward Voltage @ = 1.0 A	1.0 V	1.3 V	1.7 V
$I_R$	Maximum DC Reverse Current @ $T_a = 25\text{ °C}$ at Rated DC Blocking Voltage @ $T_a = 125\text{ °C}$	5 $\mu$ A 150 $\mu$ A		
$R_{th(j-a)}$	Typical Thermal Resistance (See note)	95 °C/W		

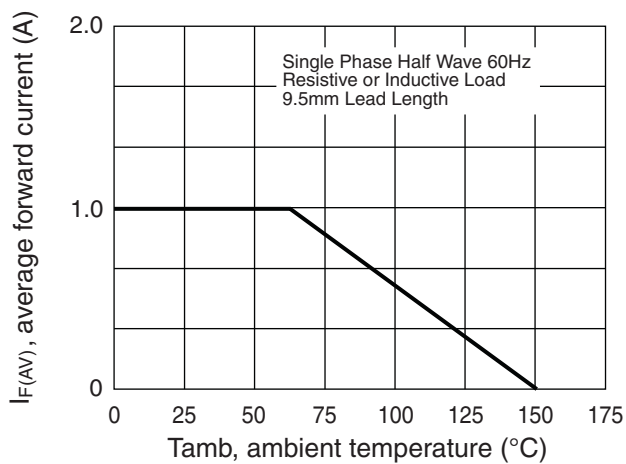
NOTE: Mount on Cu-Pad size 5mm x 5mm on PCB.

**Rating And Characteristic Curves**

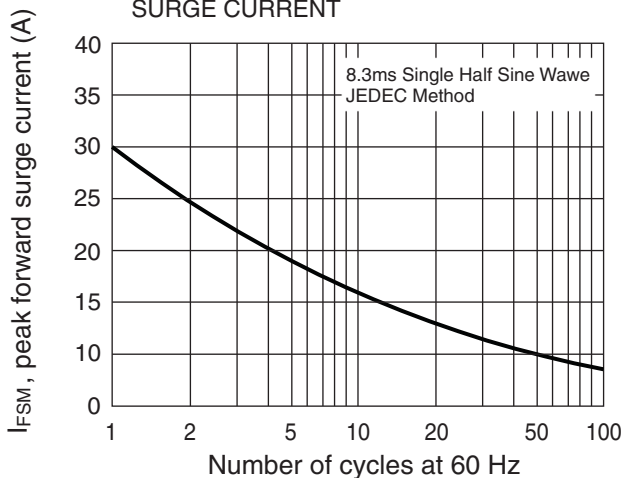
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC



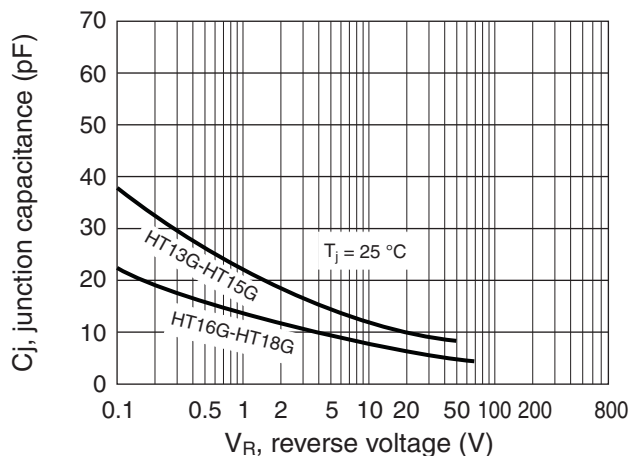
MAXIMUM FORWARD CURRENT DERATING CURVE



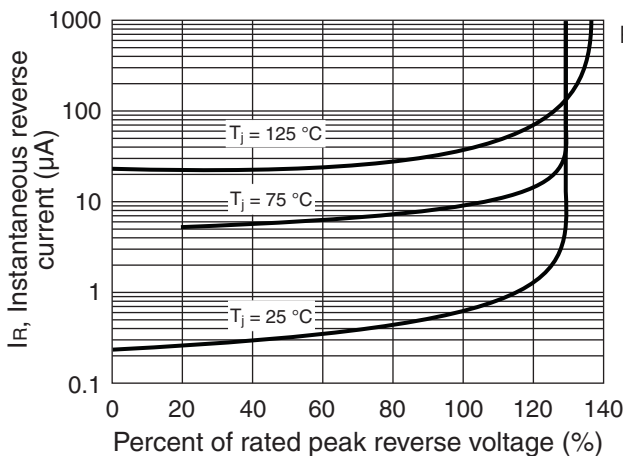
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE



TYPICAL REVERSE CHARACTERISTIC



REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

