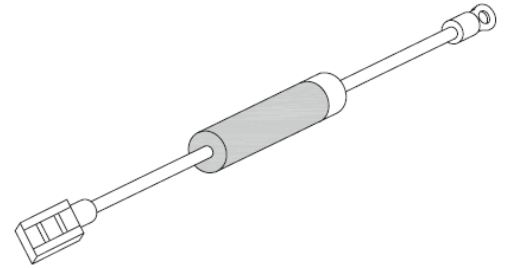


**0.55A High Voltage Rectifier Assembly**

**Features**

- Controlled avalanche characteristic combined with the ability to dissipate reverse power
- Low forward voltage drop
- Typical reverse current less than 1µA
- High overload surge capability
- High temperature soldering guaranteed: 260°C/10 seconds, /0.375" (9.5mm) lead length at 5lbs. (2.3kg) tension
- RoHS Compliance



**THV5T**  
Different terminal options  
are available on request



**Mechanical Data**

<b>Case:</b>	Reliable low cost construction utilizing molded plastic technique
<b>Epoxy:</b>	Plastic package has UL flammability classification 94V-0
<b>Terminals:</b>	Axial leads, solderable per MIL-STD-202, Method 208
<b>Polarity:</b>	Color band denotes cathode end
<b>Weight:</b>	2.8 grams

**Maximum Ratings and Electrical Characteristics** ( $T_A=25^\circ\text{C}$  unless noted otherwise)

Symbol	Description	THV 508T	THV 509T	THV 510T	THV 512T	THV 514T	THV 515T	THV 516T	Unit	Conditions	
<b>VRRM</b>	Maximum Recurrent Peak Reverse Voltage	8000	9000	10000	12000	14000	15000	16000	V		
<b>VRMS</b>	Maximum RMS Voltage	5600	6300	7000	8400	9800	10500	11200	V		
<b>VDC</b>	Maximum DC Blocking Voltage	8000	9000	10000	12000	14000	15000	16000	V		
<b>IF(AV)</b>	Maximum Average Forward Rectified Current	550								mA	$T_A=55^\circ\text{C}$
<b>IFSM</b>	Peak Forward Surge Current	30								A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)

# 0.55A High Voltage Rectifier Assembly

## THV508T - THV516T

Symbol	Description	THV 508T	THV 509T	THV 510T	THV 512T	THV 514T	THV 515T	THV 516T	Unit	Conditions	
<b>V<sub>F</sub></b>	Maximum Instantaneous Forward Voltage	10.0		12.0		15.0			V	I <sub>F</sub> =550mA	
<b>I<sub>R</sub></b>	Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0								μA	
<b>T<sub>J</sub></b>	Operating Temperature Range	-40 to +125								°C	
<b>T<sub>STG</sub></b>	Storage Temperature Range	-40 to +130								°C	

**Note:** Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

### Typical Characteristics Curves

Fig.1- Forward Current Derating Curve

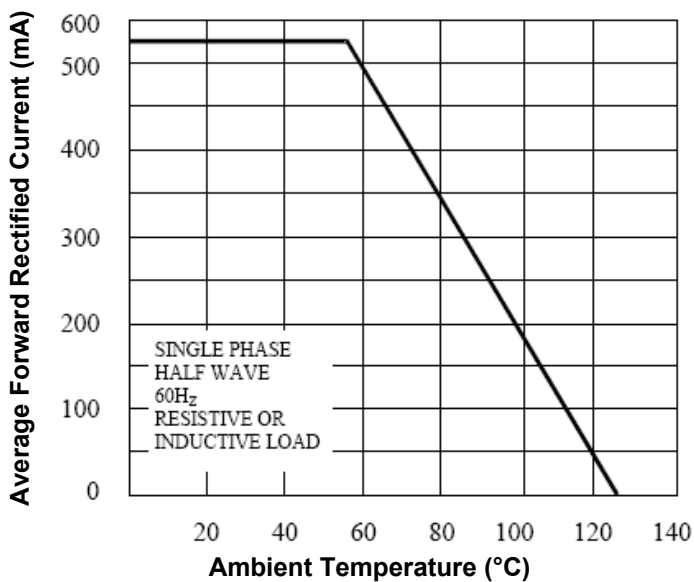
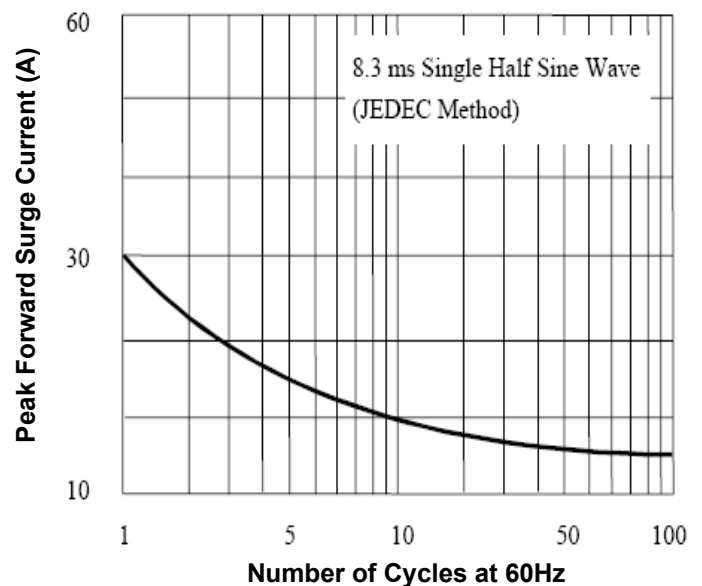


Fig.2-Max. Non-Repetitive Peak Forward Surge Rating



# 0.55A High Voltage Rectifier Assembly

## THV508T - THV516T

Fig.3-Typical Reverse Characteristics

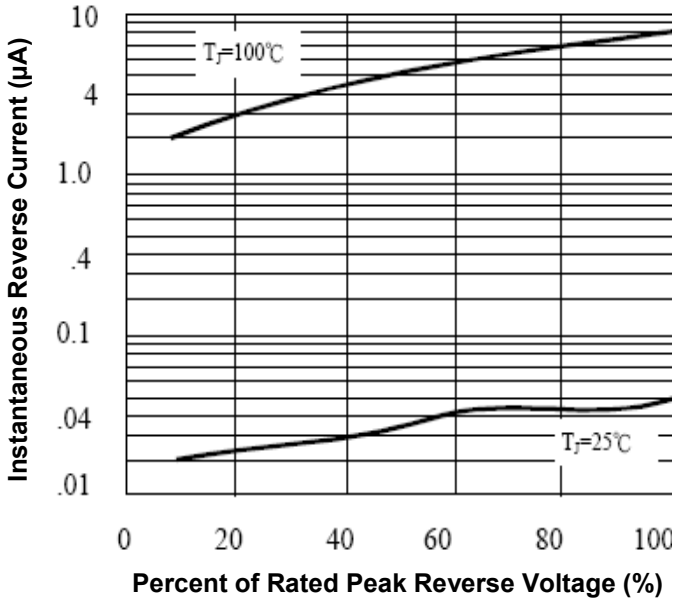
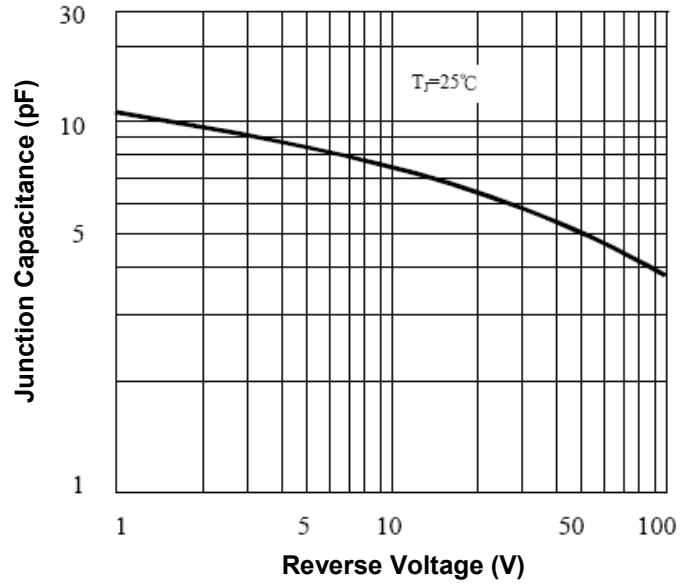
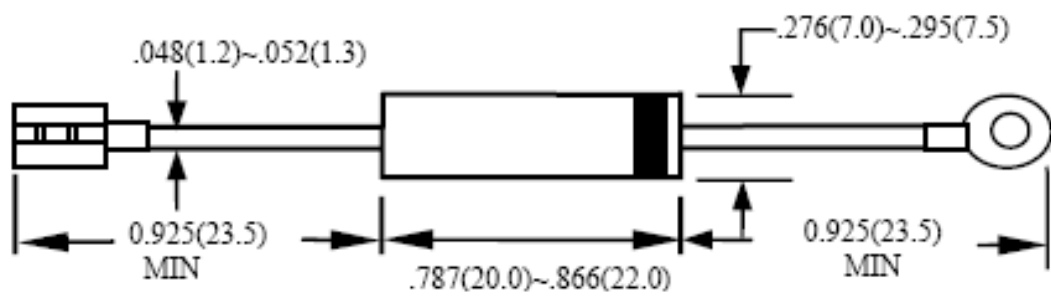


Fig.4- Typical Junction Capacitance



### Dimensions in inches (mm)



0.25 Inch Female  
type

φ 0.17 Inch Tongue  
type

THV5T

\* Different terminal options are available on request

# 0.55A High Voltage Rectifier Assembly

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THV508T - THV516T

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