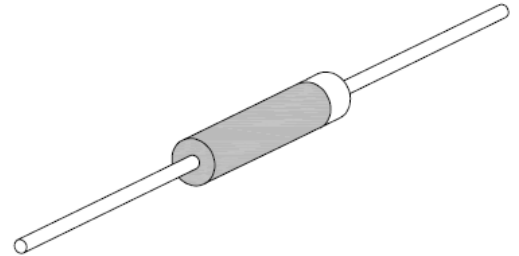


**0.55A High Voltage Rectifier Assembly**

**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



**THV5**



**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** ( $T_A=25^{\circ}C$  unless noted otherwise)

Symbol	Description	THV508	THV509	THV510	THV512	THV514	THV515	THV516	Unit	Conditions
<b>V<sub>RRM</sub></b>	Maximum Recurrent Peak Reverse Voltage	8000	9000	10000	12000	14000	15000	16000	V	
<b>V<sub>RMS</sub></b>	Maximum RMS Voltage	5600	6300	7000	8400	9800	10500	11200	V	
<b>V<sub>DC</sub></b>	Maximum DC Blocking Voltage	8000	9000	10000	12000	14000	15000	16000	V	
<b>I<sub>F(AV)</sub></b>	Maximum Average Forward Rectified Current	550							mA	TA=55° C
<b>I<sub>FSM</sub></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

## THV508 - THV516

Symbol	Description	THV508	THV509	THV510	THV512	THV514	THV515	THV516	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

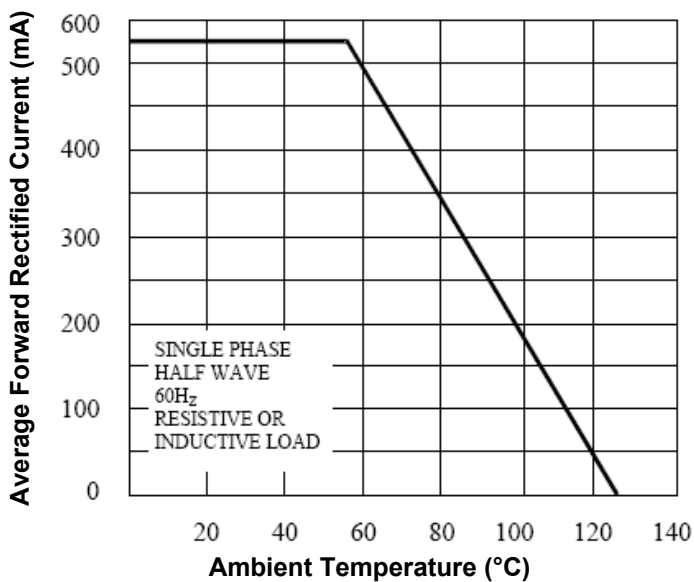
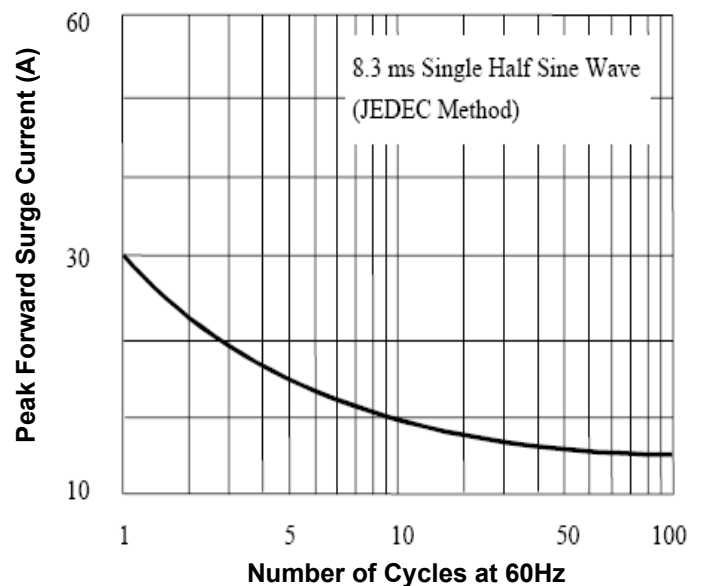


Fig.2-Max. Non-Repetitive Peak Forward Surge Rating



# 0.55A High Voltage Rectifier Assembly

## THV508 - THV516

Fig.3-Typical Reverse Characteristics

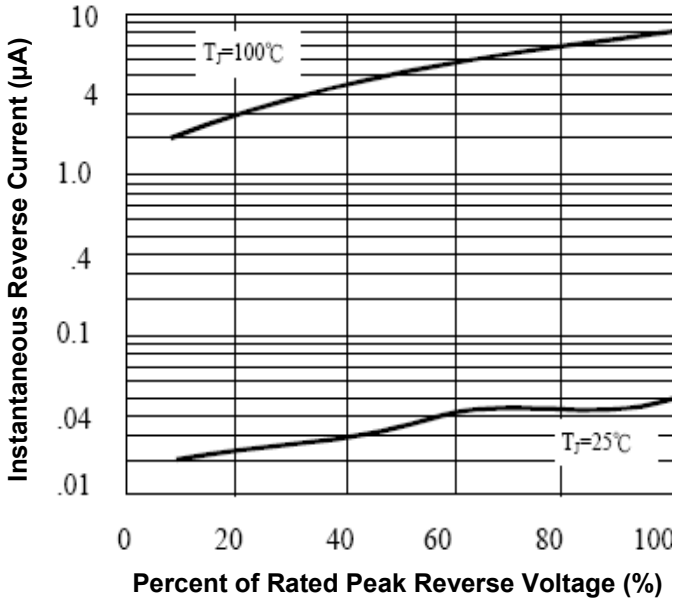
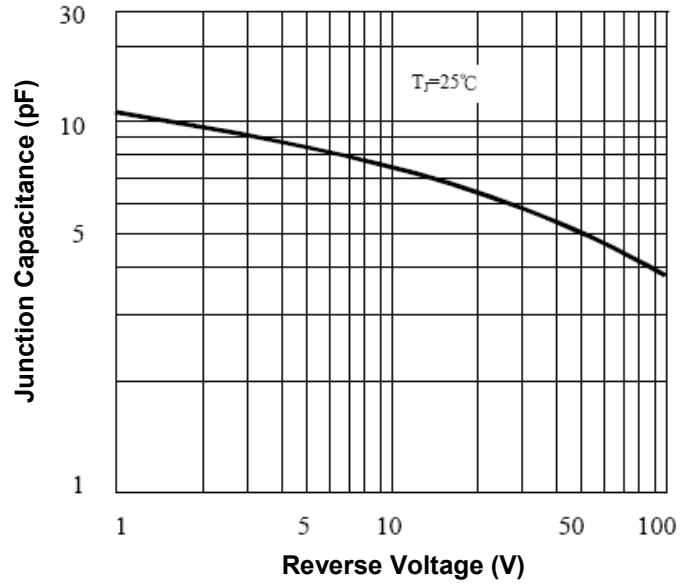
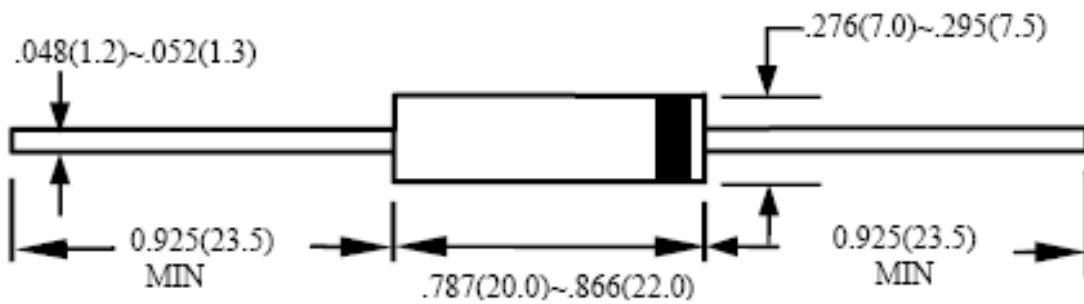


Fig.4- Typical Junction Capacitance



### Dimensions in inches (mm)



THV5

# 0.55A High Voltage Rectifier Assembly

---

THV508 - THV516

## How to contact us:

### US HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800) TAITRON (800) 824-8766 (661) 257-6060

Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415

Email: [taitron@taitroncomponents.com](mailto:taitron@taitroncomponents.com)

Http://[www.taitroncomponents.com](http://www.taitroncomponents.com)

### TAITRON COMPONENTS MEXICO, S.A .DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P.  
42970 MEXICO

Tel: +52-55-5560-1519

Fax: +52-55-5560-2190

### TAITRON COMPONETS INCORPORATED E REPRESENTAÇÕES DO BRASIL LTDA

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL

Tel: +55-11-5574-7949

Fax: +55-11-5572-0052

### TAITRON COMPONETS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

METROBANK PLAZA, 1160 WEST YAN' AN ROAD, SUITE 1503, SHANGHAI, 200052, CHINA

Tel: +86-21-5424-9942

Fax: +86-21-5424-9931