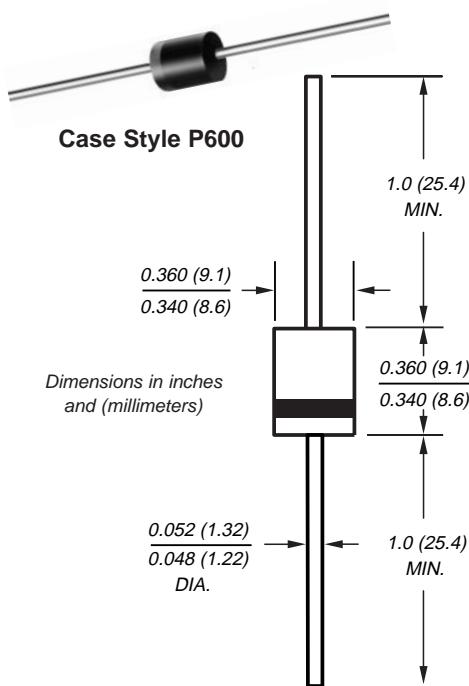


## High Current Axial Plastic Rectifiers



**Reverse Voltage** 50 to 800V  
**Forward Current** 6.0A

### Features

- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- High forward current capability
- Diffused junction
- Construction utilizes void-free molded plastic technique
- High surge current capability
- High temperature soldering guaranteed:  
250°C/10 seconds, 0.375" (9.5mm) lead length,  
5 lbs. (2.3kg) tension

### Mechanical Data

**Case:** Void-free molded plastic body  
**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.07 oz., 2.1 g

### Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	GI750	GI751	GI752	GI754	GI756	GI758	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	V
Maximum non-repetitive peak reverse voltage	V <sub>RSM</sub>	60	120	240	480	720	1200	V
Maximum average forward rectified current at T <sub>A</sub> = 60°C, P.C.B. mounting (fig. 1) T <sub>L</sub> = 60°C, 0.125" (3.18mm) lead length (fig. 2)	I <sub>F(AV)</sub>				6.0			A
					22			
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>				400			A
Typical thermal resistance <sup>(1)</sup>	R <sub>θJA</sub> R <sub>θJL</sub>				20			°C/W
Operating junction and storage temperature range	T <sub>J,TSTG</sub>				-50 to +150			°C

### Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	GI750	GI751	GI752	GI754	GI756	GI758	Unit
Maximum instantaneous forward voltage at: 6.0A 100A	V <sub>F</sub>				0.90		0.95	V
					1.25		1.30	
Maximum DC reverse current at rated DC blocking voltage T <sub>A</sub> = 25°C T <sub>A</sub> = 100°C	I <sub>R</sub>				5.0			μA mA
					1.0			
Typical reverse recovery time at I <sub>F</sub> = 0.5A, I <sub>R</sub> = 1.0A, I <sub>rr</sub> = 0.25A	t <sub>rr</sub>				2.5			μs
Typical junction capacitance at 4.0V, 1MHz	C <sub>J</sub>				150			pF

**Note:**(1) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, P.C.B. mounted with 1.1" x 1.1" (30 x 30mm) copper pads

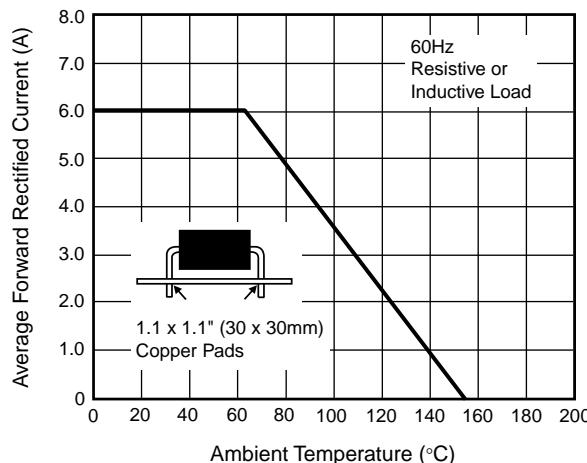
# GI750 thru GI758

Vishay Semiconductors  
formerly General Semiconductor

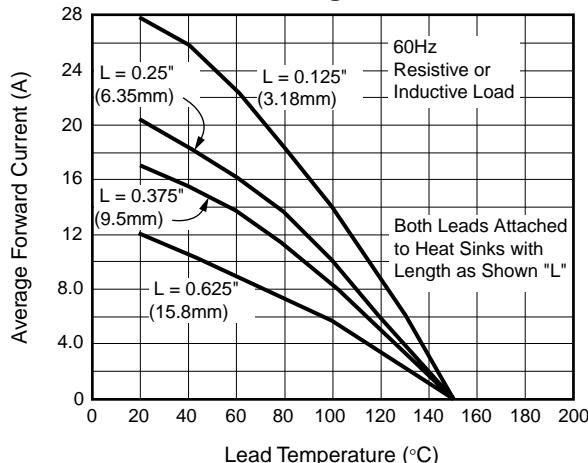


## Ratings and Characteristic Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

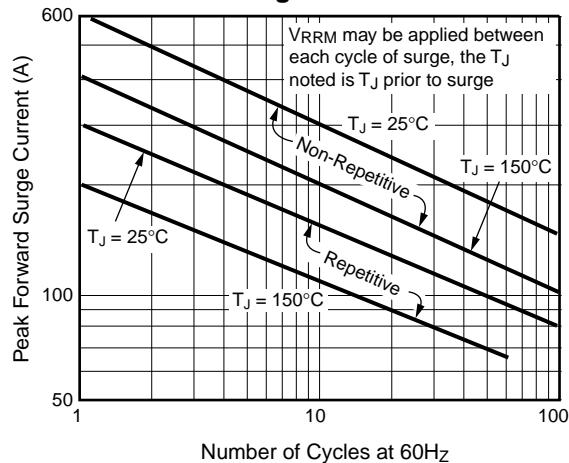
**Fig. 1 – Maximum Forward Current Derating Curve**



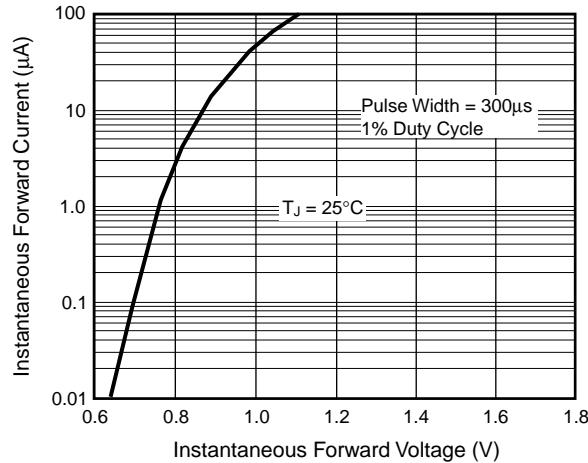
**Fig. 2 – Maximum Forward Current Derating Curve**



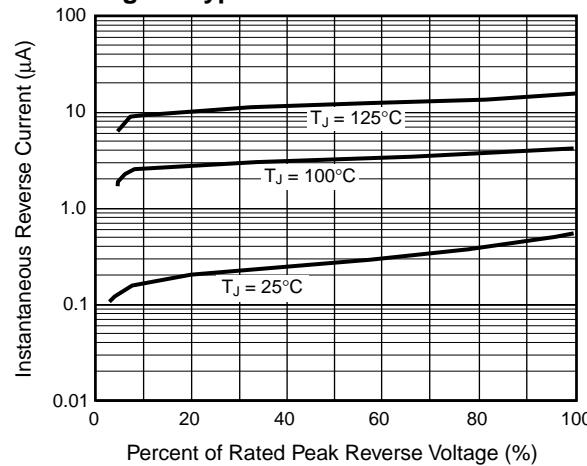
**Fig. 3 – Maximum Peak Forward Surge Current**



**Fig. 4 – Typical Instantaneous Forward Characteristics**



**Fig. 5 – Typical Reverse Characteristics**



**Fig. 6 – Typical Transient Thermal Impedance**

