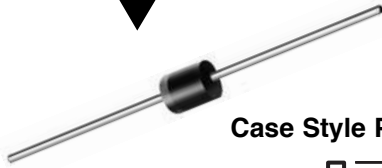




New Product

GPP60A thru GPP60G

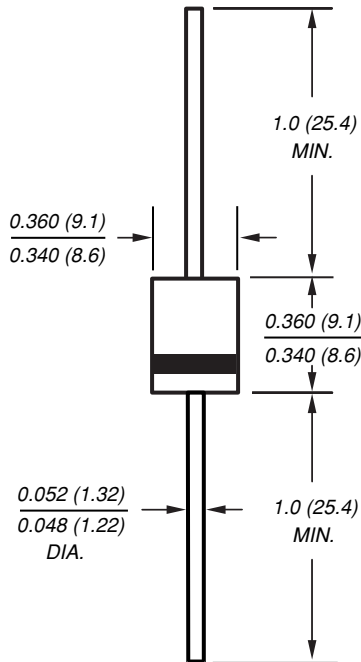
Vishay Semiconductors
formerly General Semiconductor



Glass Passivated Junction Plastic Rectifiers

Reverse Voltage 50 to 400 V
Forward Current 6.0 A

Case Style P600



Dimensions in inches and (millimeters)

Features

- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- Glass passivated junction
- Capable of meeting environmental standards of MIL-S-19500
- 6.0 Ampere operation at $T_A=55^\circ\text{C}$ with no thermal runaway
- Typical I_R less than $0.2\mu\text{A}$
- High temperature soldering guaranteed: $250^\circ\text{C}/10$ seconds, $0.375''$ (9.5mm) lead length, 5 lbs. (2.3kg) tension

Mechanical Data

Case: P600, molded plastic over glass passivated chip

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.07 ounce, 2.0 grams

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symb.	GPP60A	GPP60B	GPP60D	GPP60G	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	V
Maximum average forward rectified current $0.375''$ (9.5mm) lead length at $T_A = 55^\circ\text{C}$	$I_{F(AV)}$	6.0				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	500				A
Typical thermal resistance ⁽¹⁾	$R_{\theta JA}$ $R_{\theta JL}$	20 4				$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +175				$^\circ\text{C}$

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symb.	GPP60A	GPP60B	GPP60D	GPP60G	Unit
Maximum instantaneous forward voltage at 6.0A	V_F	1.1				V
Maximum reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 100^\circ\text{C}$	I_R	5.0 100				μA
Maximum reverse recovery time $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$	t_{rr}	5.5				μs
Typical junction capacitance at 4.0V, 1MHz	C_J	110				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

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

Fig. 1 – Forward Current Derating Curve

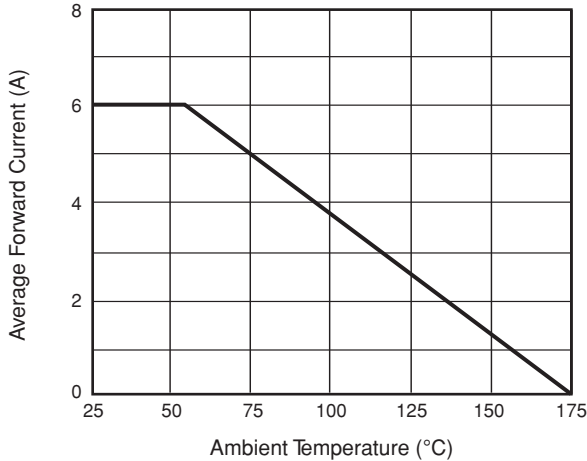


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

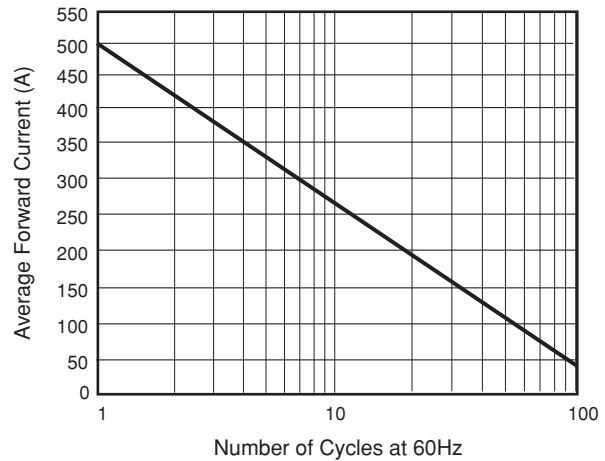


Fig. 3 – Typical Instantaneous Forward Characteristics

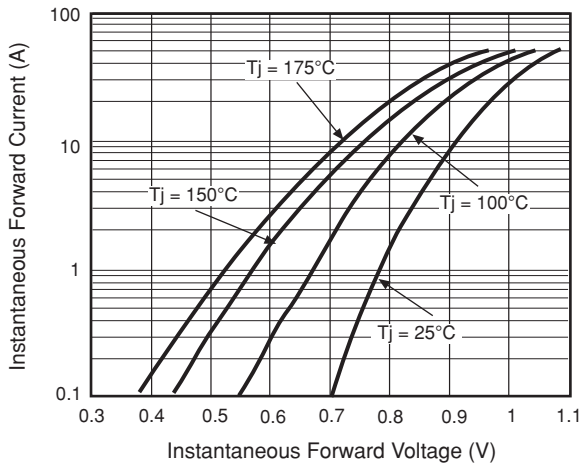


Fig. 4 – Typical Reverse Characteristics

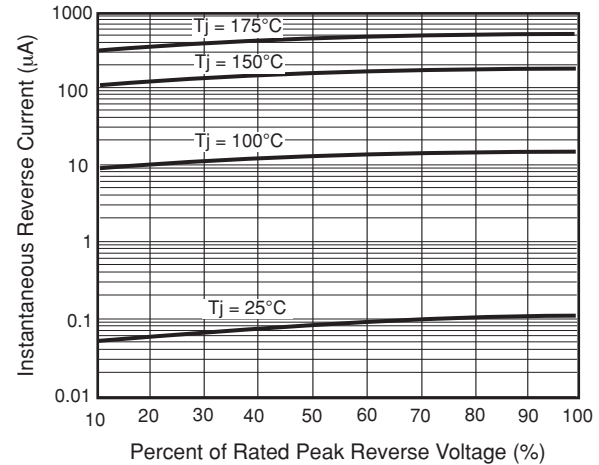


Fig. 5 – Typical Junction Capacitance

