

# Glass Passivated Rectifier Diodes

## V<sub>RRM</sub> - 50 Volts to 1000 Volts, 6A

**multicomp** PRO

**RoHS  
Compliant**



### Features

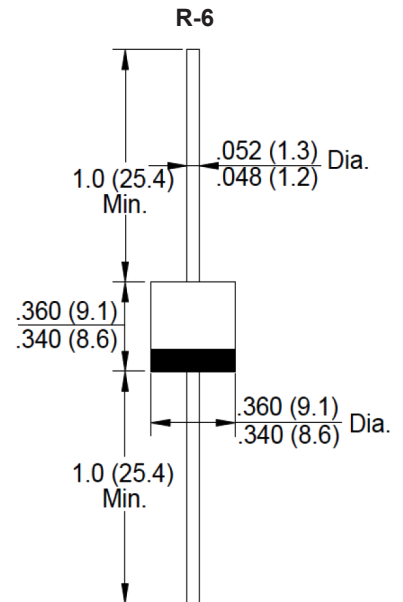
- Low cost
- Low reverse leakage current
- Low forward voltage drop
- High surge capacity
- Meet UL flammability classification 94V-0
- Lead free
- Case style: R-6 molded plastic

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.



Dimensions : Inches (Millimetres)

Characteristics	Symbol	P600AG	P600DG	P600GG	P600KG	P600MG	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	200	400	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	140	280	560	700	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	200	400	800	1000	
Maximum Average Forward Rectified Current @ T <sub>A</sub> = 55°C	I <sub>(AV)</sub>	6					A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	250					A
I <sup>2</sup> t Rating for Fusing (t<8.3mS)	I <sup>2</sup> t	259					A <sup>2</sup> s
Peak Forward Voltage at 6A DC (Note 1)	V <sub>F</sub>	1.1					V
Max. DC Reverse Current @ T <sub>J</sub> = 25°C	I <sub>R</sub>	10					μA
Rated DC Blocking Voltage @ T <sub>J</sub> = 125°C		100					
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	100					pF
Typical Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	10					°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150					°C
Storage Temperature Range	T <sub>STG</sub>						

### Notes:

1. 300μS pulse width, 2%duty cycle
2. Measured at 1 MHz and applied reverse voltage of 4V DC
3. The typical data above is for reference only.

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### Rating and Characteristic Curves

Fig. 1 - Forward Current Derating Curve

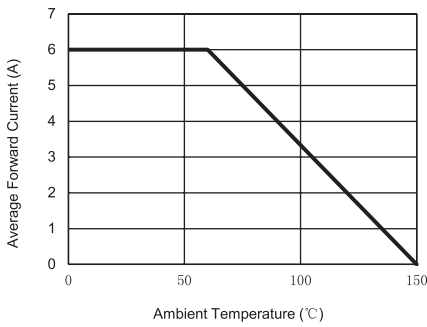


Fig. 2 - Maximum Non-Repetitive Surge Current

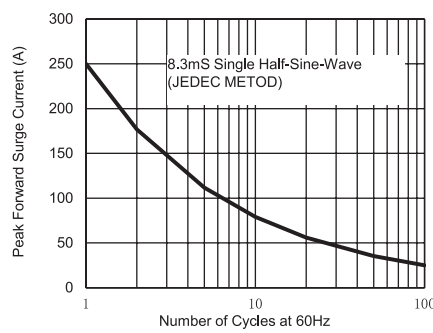


Fig. 3 - Typical Reverse Characteristics

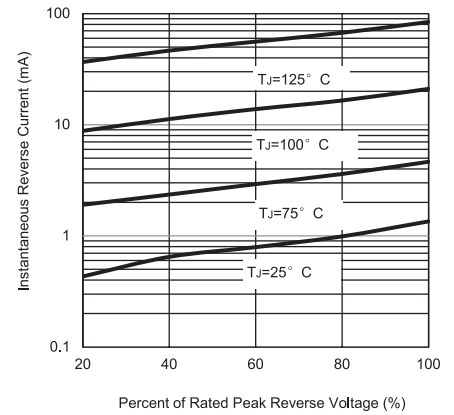


Fig. 4 - Typical Forward Characteristics

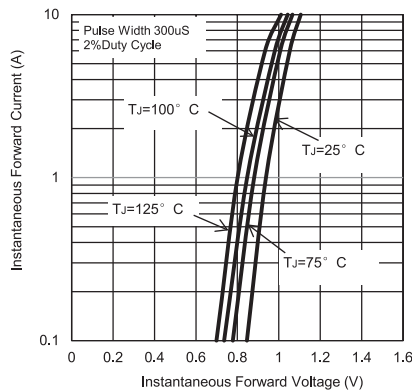
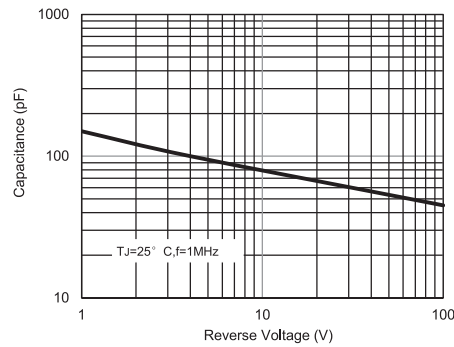


Fig. 5 - Typical Junction Capacitance



### Part Number Table

Description	Part Number
Rectifier Diode, 50V, 6A, R-6	P600AG
Rectifier Diode, 200V, 6A, R-6	P600DG
Rectifier Diode, 400V, 6A, R-6	P600GG
Rectifier Diode, 800V, 6A, R-6	P600KG
Rectifier Diode, 1kV, 6A, R-6	P600MG

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