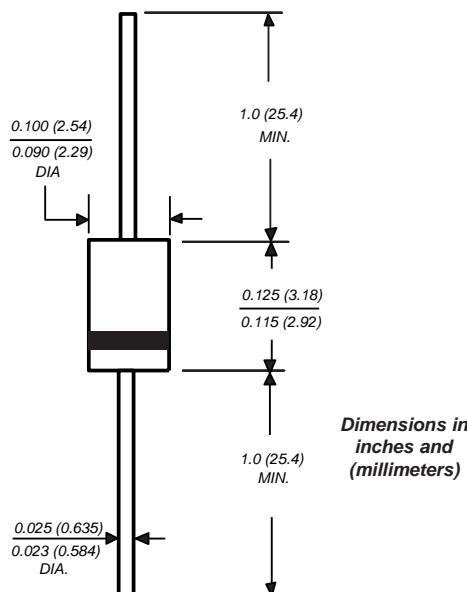




## Miniature Glass Passivated Junction Plastic Rectifier

**Case Style MPG06**

 Reverse Voltage 50 to 1000V  
 Forward Current 1.0A

### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage, high current capability
- Glass passivated chip junction
- High surge capability
- Typical IR less than 0.1 $\mu$ A
- High temperature soldering guaranteed: 250°C/10 seconds 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

### Mechanical Data

**Case:** 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:** 0.0064 oz., 0.181 g

### Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

	Symbol	MPG 06A	MPG 06B	MPG 06D	MPG 06G	MPG 06J	MPG 06K	MPG 06M	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at T <sub>A</sub> = 25°C	I <sub>F(AV)</sub>				1.0				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>				40				A
Typical thermal resistance (Note 1)	R <sub>θJA</sub> R <sub>θJL</sub>				67				°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>				-55 to +150				°C

### Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

	Symbol	MPG 06A	MPG 06B	MPG 06D	MPG 06G	MPG 06J	MPG 06K	MPG 06M	Unit
Maximum instantaneous forward voltage at 1.0A	V <sub>F</sub>				1.1				V
Maximum DC reverse current T <sub>A</sub> = 25°C at rated DC blocking voltage T <sub>A</sub> = 125°C	I <sub>R</sub>				5.0				μA
Typical reverse recovery time I <sub>F</sub> = 0.5A, I <sub>R</sub> = 1.0A, I <sub>rr</sub> = 0.25A	t <sub>rr</sub>				0.6				μs
Typical junction capacitance at 4.0V, 1MHz	C <sub>J</sub>				10				pF

**Notes:** (1) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, P.C.B. mounted with 0.22 x 0.22" (5.5 x 5.5mm) copper pads

# **MPG06A thru MPG06M**

Vishay Semiconductors  
formerly General Semiconductor



## **Ratings and Characteristic Curves** (TA = 25°C unless otherwise noted)