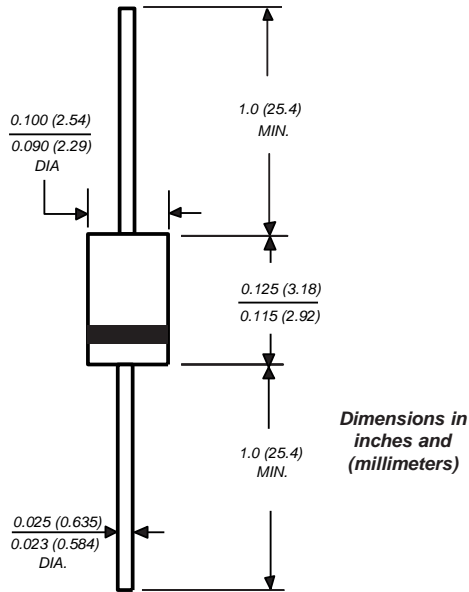




Miniature Glass Passivated Junction Plastic Rectifier

Reverse Voltage 50 to 1000V
Forward Current 1.0A

Case Style MPG06



Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage, high current capability
- Glass passivated chip junction
- High surge capability
- Typical I_R less than $0.1\mu A$
- High temperature soldering guaranteed: $250^\circ C/10$ 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_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current $0.375''$ (9.5mm) lead length at $T_A = 25^\circ C$ | $I_{F(AV)}$ | 1.0 | | | | | | | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 40 | | | | | | | A |
| Typical thermal resistance (Note 1) | $R_{\theta JA}$ $R_{\theta JL}$ | 67 30 | | | | | | | $^\circ C/W$ |
| Operating junction and storage temperature range | T_J, T_{STG} | -55 to +150 | | | | | | | $^\circ C$ |

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_F | 1.1 | | | | | | | V |
| Maximum DC reverse current $T_A = 25^\circ C$ at rated DC blocking voltage $T_A = 125^\circ C$ | I_R | 5.0 50 | | | | | | | μA |
| Typical reverse recovery time $I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A$ | t_{rr} | 0.6 | | | | | | | μs |
| Typical junction capacitance at 4.0V, 1MHz | C_J | 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 $0.22 \times 0.22''$ (5.5 x 5.5mm) copper pads

MPG06A thru MPG06M

Vishay Semiconductors
formerly General Semiconductor



Ratings and Characteristic Curves (T_A = 25°C unless otherwise noted)