

## Miniature Glass Passivated Fast Switching Plastic Rectifier

Reverse Voltage 50 to 600 V  
Forward Current 1.0 A

### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage drops, 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 passivated chip

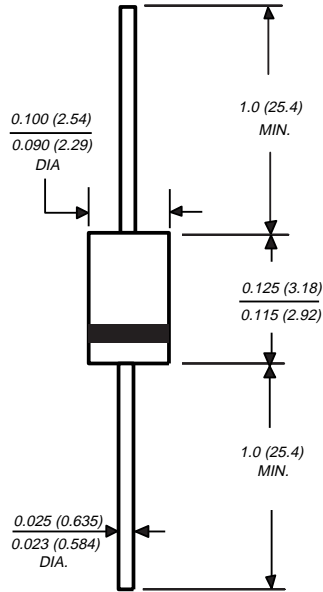
**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.0064 ounce, 0.181 gram

Case Style MPG06



Dimensions in inches and (millimeters)

## Maximum Ratings & Thermal Characteristics Ratings at $25^\circ C$ ambient temperature unless otherwise specified.

	SYMBOLS	RMPG 06A	RMPG 06B	RMPG 06D	RMPG 06G	RMPG 06J	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	V
Maximum DC blocking voltage	$V_{DC}$	50	70	200	400	600	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 $25^\circ C$ ambient temperature unless otherwise specified.

	SYMBOLS	RMPG 06A	RMPG 06B	RMPG 06D	RMPG 06G	RMPG 06J	UNITS
Maximum instantaneous forward voltage at 1.0A	$V_F$	1.3					V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ C$ $T_A=125^\circ C$	$I_R$	5.0 50					$\mu A$
Typical junction capacitance at 4.0V, 1MHz	$C_J$	6.6					pF
Typical reverse recovery time at $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$	$t_{rr}$	150					200 ns

### 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

## Ratings and Characteristic Curves (T<sub>A</sub> = 25°C unless otherwise noted)

