

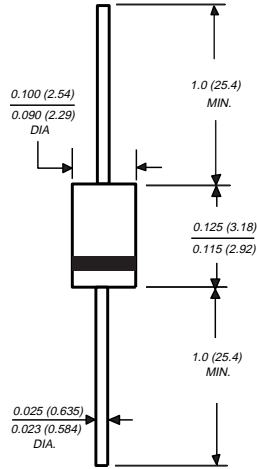
# RMPG06A THRU RMPG06J

## MINIATURE GLASS PASSIVATED JUNCTION FAST SWITCHING PLASTIC RECTIFIER

Reverse Voltage - 50 to 600 Volts

Forward Current - 1.0 Ampere

### Case Style MPG06



Dimensions are in inches and (millimeters)

### 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

## MAXIMUM RATINGS AND 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 repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	Volts
Maximum DC blocking voltage	$V_{DC}$	50	70	200	400	600	Volts
Maximum average forward rectified current, $0.375"$ (9.5mm) lead length at $T_A=25^\circ C$	$I_{(AV)}$	1.0					Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	40.0					Amps
Maximum instantaneous forward voltage at 1.0A	$V_F$	1.3					Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ C$ $T_A=125^\circ C$	$I_R$	5.0 50.0					$\mu A$
Typical junction capacitance (NOTE 1)	$C_J$	6.6					pF
Typical reverse recovery time (NOTE 2)	$t_{rr}$	150				200	ns
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$ $R_{\theta JL}$	67.0 30.0					$^\circ C/W$
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150					$^\circ C$

### NOTES:

(1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(2) Reverse recovery test conditions:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $t_{rr}=0.25A$

(3) 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 RMPG06A THRU RMPG06J

FIG. 1 - FORWARD CURRENT DERATING CURVES

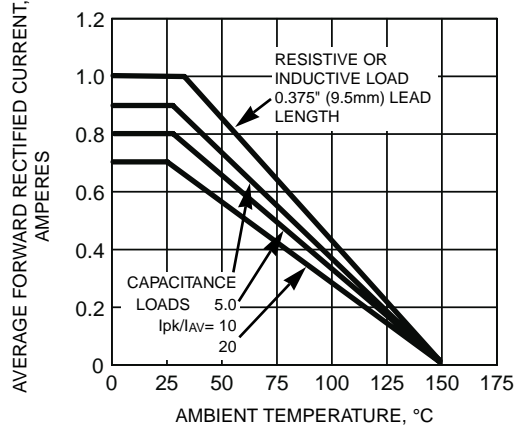


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

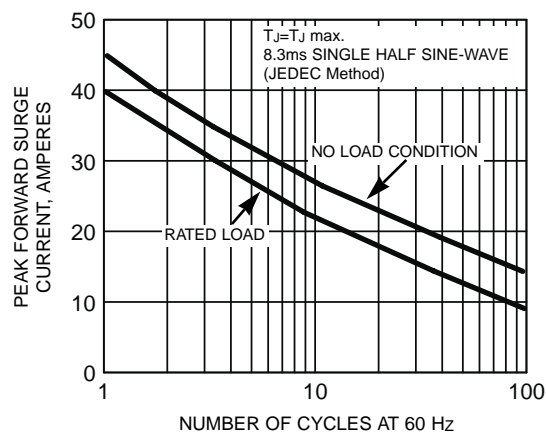


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

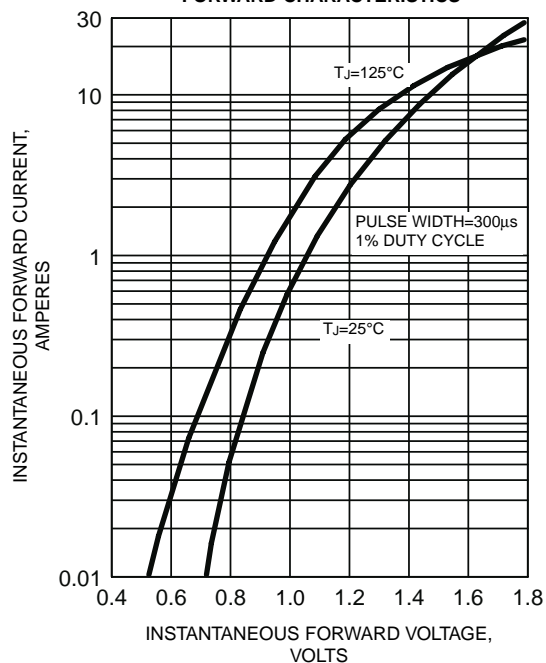


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

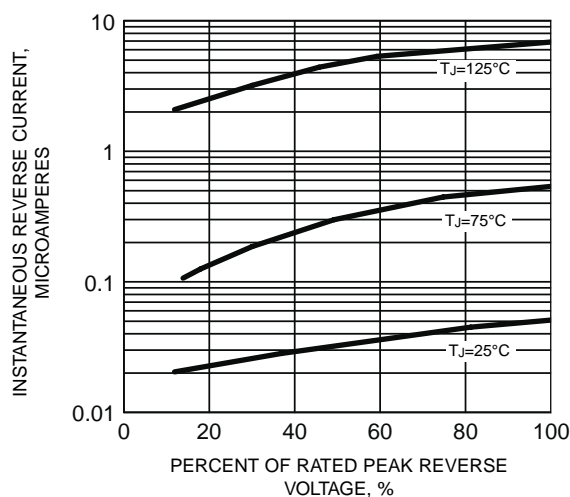


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

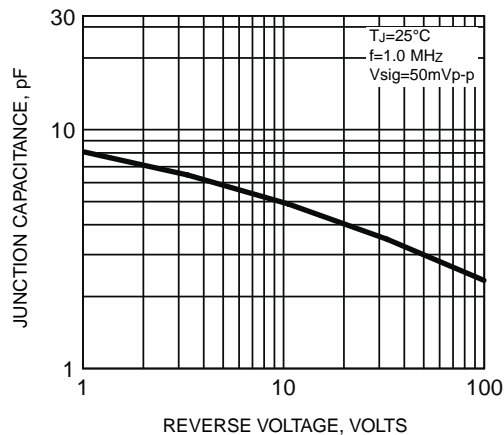


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

