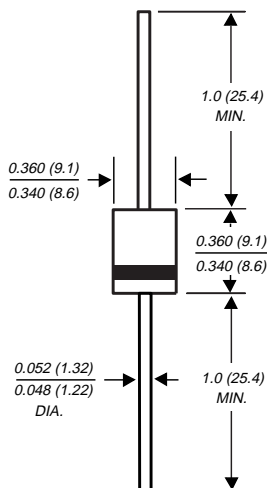


# P600A THRU P600M

## GENERAL PURPOSE PLASTIC RECTIFIER

Reverse Voltage - 50 to 1000 Volts      Forward Current - 6.0 Amperes

### Case Style P600



Dimensions in inches and (millimeters)

### FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ High forward current capability
- ◆ Construction utilizes void-free molded plastic technique
- ◆ High surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension



### MECHANICAL DATA

**Case:** Void-free molded plastic body

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

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.07 ounce, 2.1 grams

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	P600A	P600B	P600D	P600G	P600J	P600K	P600M	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at $T_A=60^\circ\text{C}$ , 0.375" (9.5mm) lead length (FIG 1) $T_L=60^\circ\text{C}$ , 0.125" (3.18mm) lead length (FIG 2)	$I_{(AV)}$	6.0 22.0						Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	400.0						Amps	
Maximum instantaneous forward voltage at: 6.0A 100A	$V_F$	0.90 1.30						1.0 1.4	Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	$I_R$	5.0 1.0						$\mu\text{A}$ mA	
Typical junction capacitance (NOTE 1)	$C_J$	150.0						pF	
Typical reverse recovery time (NOTE 2)	$t_{rr}$	2.5						$\mu\text{S}$	
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$ $R_{\theta JL}$	20.0 4.0						$^\circ\text{C/W}$	
Operating junction and storage temperature range	$T_J, T_{STG}$	-50 to +150						$^\circ\text{C}$	

### NOTES:

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

(2) Reverse recovery time conditions:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{rr}=0.25\text{A}$

(3) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, P.C.B. mounted with 1.1 x 1.1 (30 x 30mm) copper pads

# RATINGS AND CHARACTERISTIC CURVES P600A THRU P600M

