

# P600ASIF - P600MSIF

**PRV : 50 - 1000 Volts**

**I<sub>o</sub> : 6.0 Amperes**

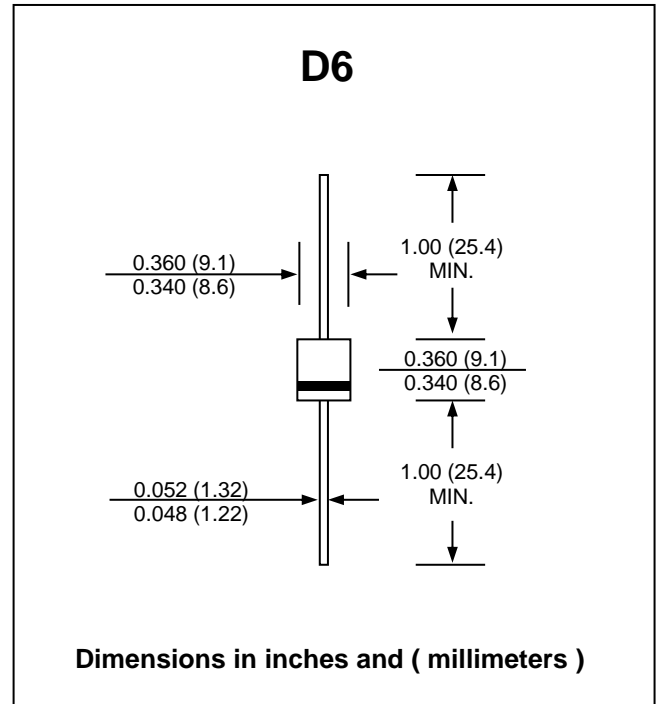
## FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* **Pb / RoHS Free**

## MECHANICAL DATA :

- \* Case : Void-free molded plastic body
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 2.1 grams

## SILICON RECTIFIER DIODES



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

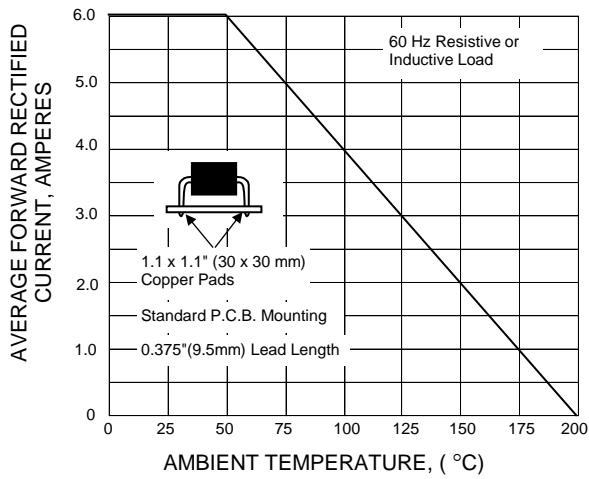
RATING	SYMBOL	P600A SIF	P600B SIF	P600D SIF	P600G SIF	P600J SIF	P600K SIF	P600M SIF	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length $T_a = 50\text{ }^\circ\text{C}$	$I_{F(AV)}$	6.0							A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	$I_{FSM}$	400							A
Maximum Instantaneous Forward Voltage at $I_F = 6\text{ A}$	$V_F$	1.0							V
Maximum DC Reverse Current at rated DC Blocking Voltage $T_j = 25\text{ }^\circ\text{C}$	$I_R$	25							$\mu\text{A}$
Max. Thermal resistance junction to ambient air <sup>(1)</sup>	$R_{\theta JA}$	20							K/W
Max. Thermal resistance junction to leads	$R_{\theta JL}$	4							K/W
Junction Temperature Range	$T_J$	- 50 to + 200							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 50 to + 200							$^\circ\text{C}$

### Notes :

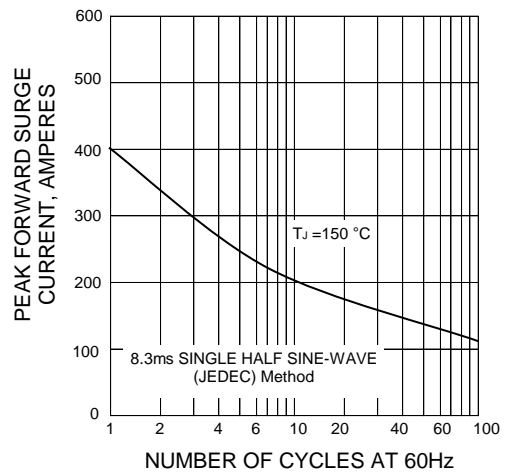
(1) If leads are kept at ambient temperature at a distance of 10 mm from case

**RATING AND CHARACTERISTIC CURVES ( P600ASIF - P600MSIF )**

**FIG.1 - MAXIMUM FORWARD CURRENT DERATING CURRENT**



**FIG.2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

