P600A THRU P600M

PLASTIC SILICON RECTIFIERS Reverse Voltage - 50 to 1000 V Forward Current - 6 A

Features

- Low forward voltage
- · High current capability
- High reliability
- · High forward surge current capability

Mechanical Data

• Case: Molded plastic, R-6

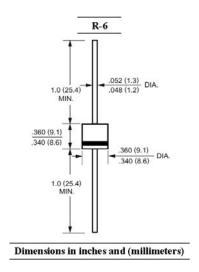
• Epoxy: UL 94V-0 rate flame retardant

• Lead: Axial leads, solderable per MIL-STD -202,

method 208 guaranteed

• Polarity: Color band denotes cathode

• Mounting Position: Any



Maximum Ratings and Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	P600A	P600B	P600D	P600G	P600J	P600K	P600M	Units
Maximum Recurrent 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 at 0.375" (9.5 mm) Lead Length, T _A = 60 °C	$I_{F(AV)}$	6							Α
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	400						А	
Maximum Forward Voltage at 6 A	V_{F}	1						V	
Maximum Reverse Current at $T_A = 25$ °C at Rated DC Blocking Voltage at $T_A = 100$ °C	I _R	5 1000							μA
Typical Junction Capacitance 1)	CJ	150						pF	
Typical Thermal Resistance 2)	$R_{ heta JA}$	10						°C/W	
Operating and Storage Temperature Range	T _J ,T _S	- 55 to + 150						°C	

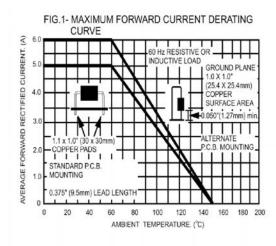
¹⁾ Measured at 1 MHz and applied reverse voltage of 4 V D.C.

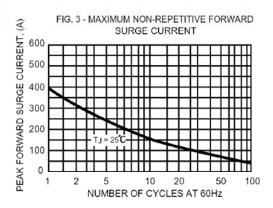


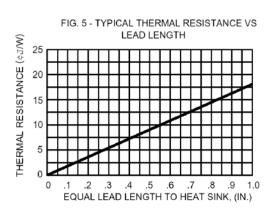




²⁾ Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length P.C.B. Mounted with 1.1 X 1.1 (30 X 30 mm) copper pads.







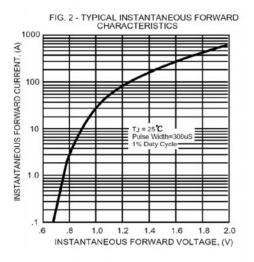
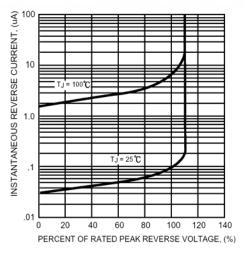


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS





SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)





