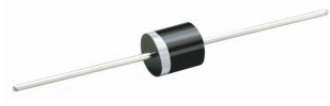
WEITRON

P600A thru P600M

6.0 Amp Silicon Rectifiers

Lead(Pb)-Free

REVERSE VOLTAGE
50 TO 1000 VOLTS
FORWARD CURRENT
6.0 AMPERES



R-6

Features:

* Low forward voltage drop
* High current capability
* High reliability
* High surge current capability

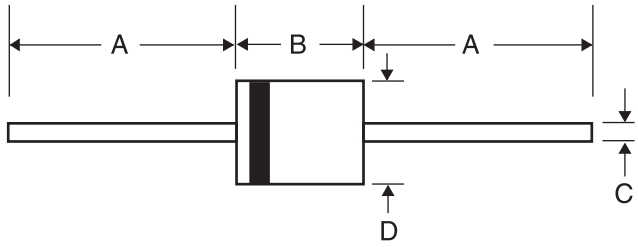
Mechanical Data:

* Case : Molded plastic.
* Epoxy : UL 94V-0 rate flame retardant.
* Lead : Axial leads, solderable per MIL-STD-202, method 208 guranteed.
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 1.65 grams

R-6 Outline Dimensions

Unit:mm

Axial Device (Through-Hole)



A		B		C		D	
Min	Max	Min	Max	Min	Max	Min	Max
25.4	-	8.6	9.1	1.2	1.3	8.6	9.1

Maximum Ratings and Electrical Characteristics

Rating 25˚C Ambient Temperature Unless Otherwise Specified.
Single Phase Half Wave, 60Hz , Resistive or Inductive Load.
For Capacitive Load, Derate Current by 20%.

Characteristics	Symbol	P600A	P600B	P600D	P600G	P600J	P600K	P600M	Unit
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 .375"(9.5m) Lead length at T_A=60˚C	$I_{F(AV)}$	6.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	400							A
Maximum Instantaneous at 6.0A DC	V_F	0.95							V
Maximum DC Reverse Current @Tj=25˚C At Rated DC Blocking Voltage @Tj=100˚C	I_R	10.0 400							μA
Typical Junction Capacitance (Note 1)	C_J	100							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	10							˚C/W
Operating Temperature Range	T_J	-65 to +175							˚C
Storage Temperature Range	T_{STG}	-65 to +175							˚C

NOTES: 1. Measured at 1.0MHz applied reverse voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Ambient .375"(9.5mm) lead length.

RATING AND CHARACTERISTIC CURVES

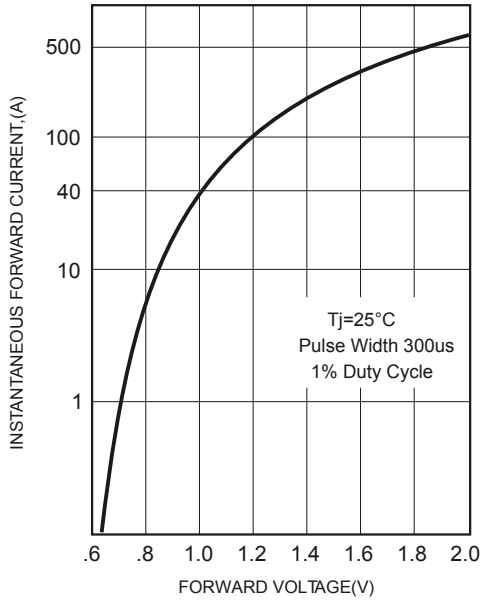


FIG.1-TYPICAL FORWARD CHARACTERISTICS

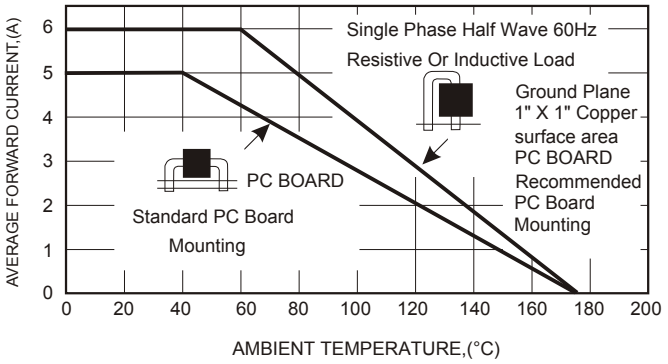


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

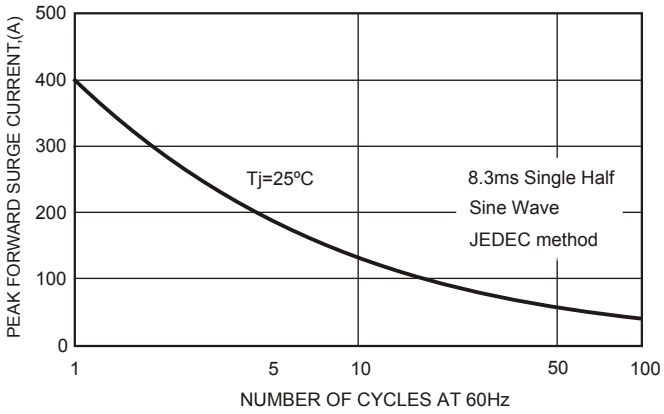


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

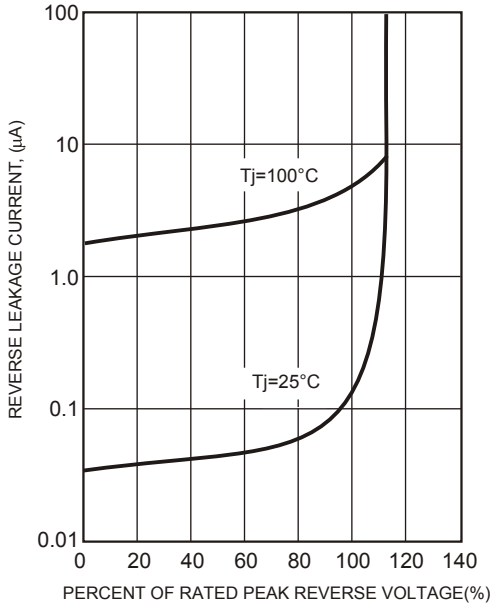


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

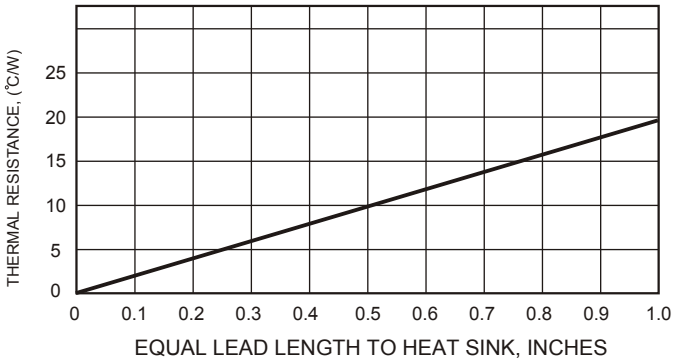


FIG.5 - TYPICAL THERMAL RESISTANCE VS. LEAD LENGTH