

Silicon Rectifier

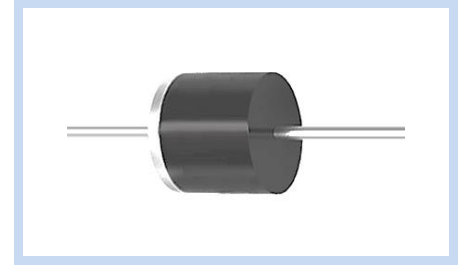
6A R-6 Axial

6Axx Series

MERITEK

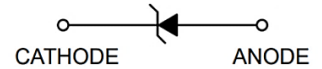
FEATURES

- Reverse Voltage Range: 50~1000V
- High Surge Current Capability
- Applications: Switching Mode Converters and Inverters, DC to DC Converter, High Frequency Rectification, Bypass Diode



MECHANICAL DATA

- Case: R-6, Molded Plastic
- UL Flammability Classification Rating 94V-0
- Lead: Axial leads, solderable per MIL-STD-202, method 208
- Polarity: Color band denotes cathode end



ELECTRICAL CHARACTERISTICS

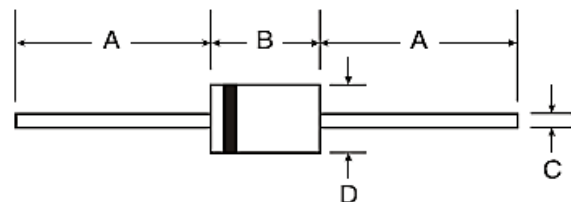
Parameter	Symbols	6A05	6A1	6A2	6A4	6A6	6A8	6A10	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 0.375"(9.5mm) Lead Length at $T_A=50^{\circ}C$	$I_{(AV)}$	6							A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	250							A
Maximum Forward Voltage at 6.0A DC and $T_J=25^{\circ}C$	V_F	1.1							V
Maximum Reverse Current at Rated DC Blocking Voltage	$T_J=25^{\circ}C$	10							μA
	$T_J=100^{\circ}C$								
Typical Junction Capacitance	C_J	150							pF
Typical Thermal Resistance	$R_{\theta JA}$	10							$^{\circ}C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^{\circ}C$

Note:

1. Ratings at 25°C ambient temperature unless otherwise specified.
2. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.
3. Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC.
4. Thermal Resistance from junction to ambient at 0.375"(9.5mm) lead length, P.C.B. Mounted with 1.1"x1.1" (30 x30mm) copper pads.

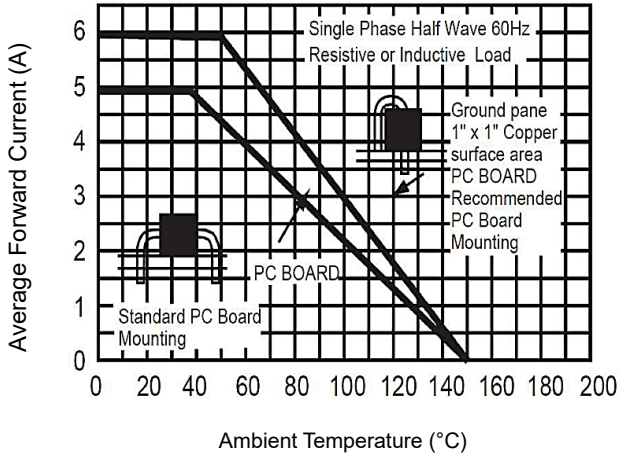
DIMENSIONS

R-6	Min.(mm)	Max. (mm)
A	25.4	-
B	8.6	9.1
C	1.2	1.3
D	8.6	9.1

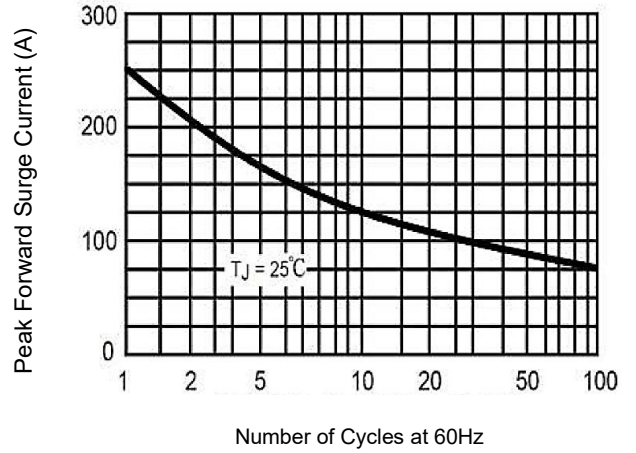


CHARACTERISTIC CURVES

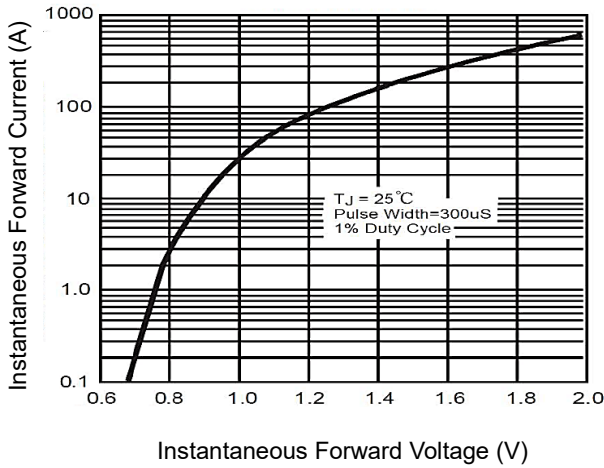
Typical Forward Current Derating Curve



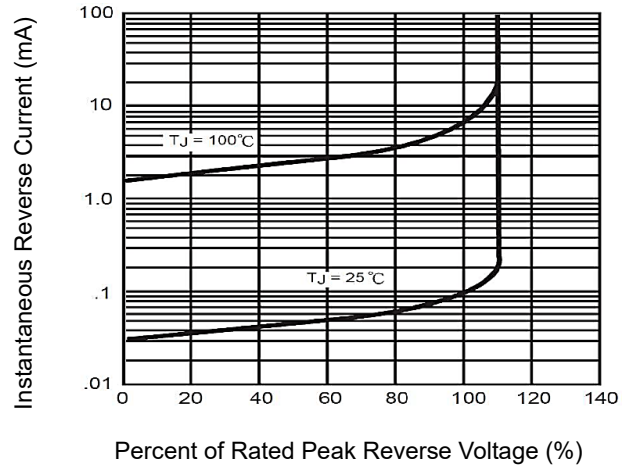
Maximum Non-repetitive Forward Surge Current



Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics



Typical Thermal Resistance Characteristics

