

Features

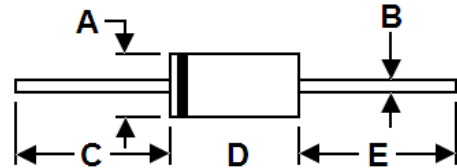
- * Low Forward Voltage Drop
- * High Current Capability
- * High Reliability
- * High Surge Current Capability



RoHS
COMPLIANT

Package Outline Dimensions

P600:



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	8.6	9.1	0.340	0.360
B	1.2	1.3	0.048	0.052
C	25.4	-	1.0	-
D	8.6	9.1	0.340	0.360
E	25.4	-	1.0	-

Mechanical Data

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

Maximum Ratings and Electrical Characteristics

Rating 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%.

Type Number	Symbol	6A05	6A1	6A2	6A4	6A6	6A8	6A10	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 D.C Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375" (9.5mm) Lead Length @ $T_A=60^\circ\text{C}$	$I_{F(AV)}$	6.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	250							A
Maximum Instantaneous Forward Voltage at 6.0A	V_F	1.0							V
Maximum D.C Reverse Current @ $T_A=25^\circ\text{C}$ at Rated D.C Blocking Voltage @ $T_A=100^\circ\text{C}$	I_R	5.0 200							μA
Typical Junction Capacitance(Note1)	C_J	100							pF
Typical Thermal Resistance(Note2)	$R_{\theta JA}$	10							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J/T_{STG}	-55 to +125 / -55 to +150							$^\circ\text{C}$

Note:1、 Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C.

2、 Thermal Resistance From Junction to Ambient 0.375"(9.5mm) Lead Length.

Ratings and Characteristic Curves

FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE

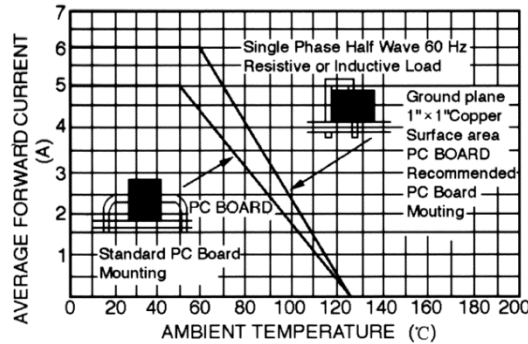


FIG. 2 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

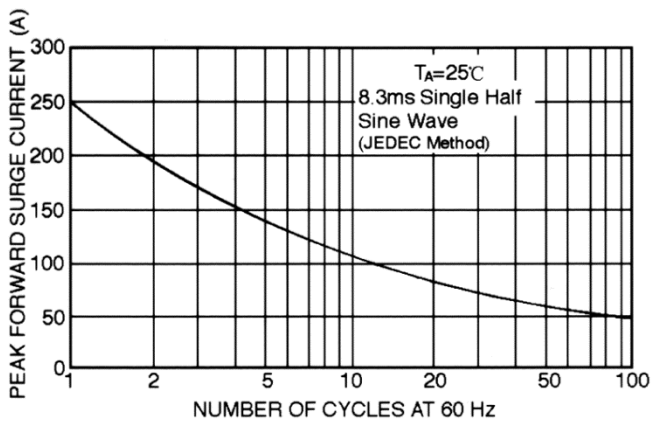


FIG. 3 – TYPICAL FORWARD SURGE CURRENT

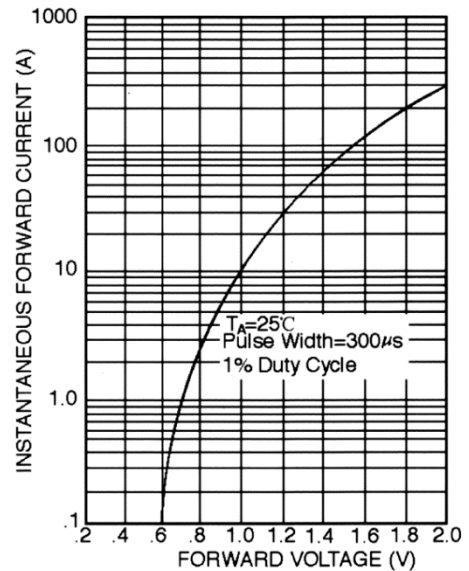


FIG. 4 – TYPICAL REVERSE CHARACTERISTICS

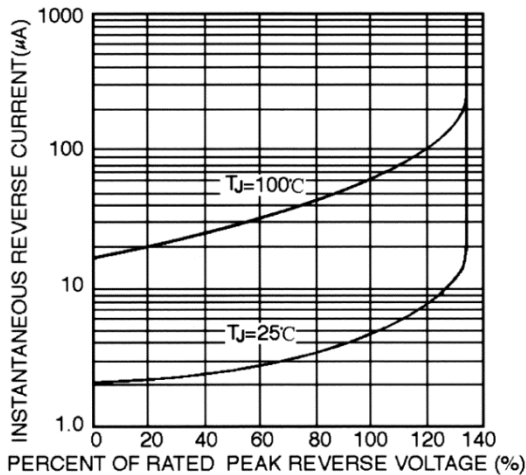
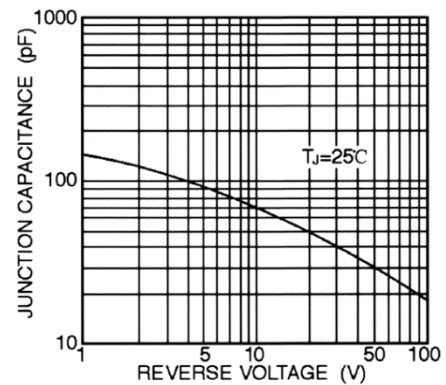


FIG. 5 – TYPICAL JUNCTION CAPACITANCE





6A05 THRU 6A10
6.0 Amps. Silicon Rectifiers

Ordering Information

Part No.	Package	Packing
6A05~6A10	P600	0.5K/AMMO box
6A05~6A10	P600	0.8K/13" Paper reel
6A05~6A10	P600	0.2K/Bulk packing