



## 6A05 THRU 6A10

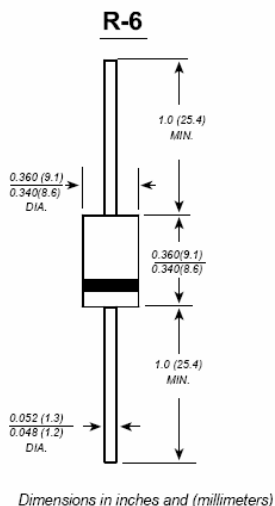
### GENERAL PURPOSE SILICON RECTIFIER

**Reverse Voltage - 50 to 1000 Volts    Forward Current - 6.0 Amperes**

#### FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:  
250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3ka) tension
- ◆ This is a Pb - Free Device
- ◆ All SMC parts are traceable to the wafer lot
- ◆ Additional testing can be offered upon request

#### MECHANICAL DATA



**Case:** R-6 molded plastic body  
**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.072 ounce, 2.05 grams  
**Marking:** Part Name, SSG and Date Code

#### MARKING DIAGRAM



Where XXXXX is YYWWL

6A05	= Part Name
SSG	= SSG
YY	= Year
WW	= Week
L	= Lot Number

**Cautions:** Molding resin  
Epoxy resin UL:94V-0

#### ORDERING INFORMATION

Device	Package	Shipping
6A05-6A10	R-6 (Pb-Free)	500pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

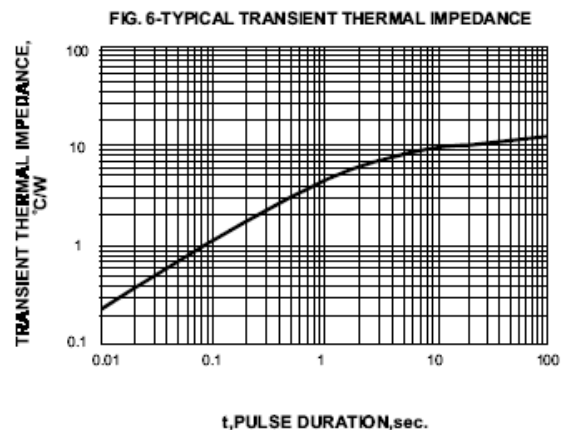
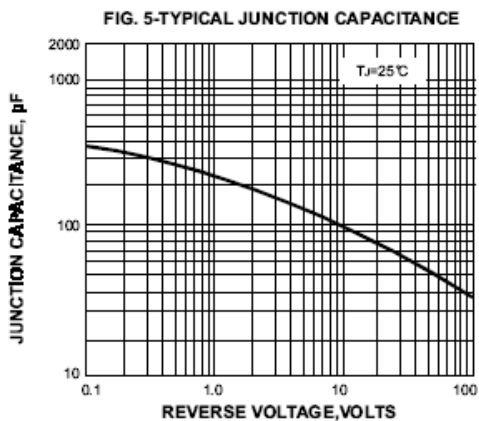
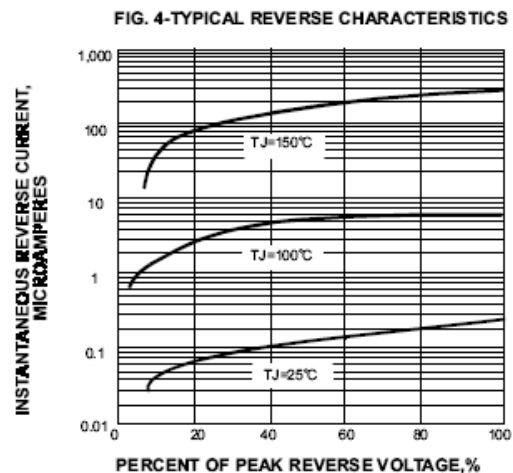
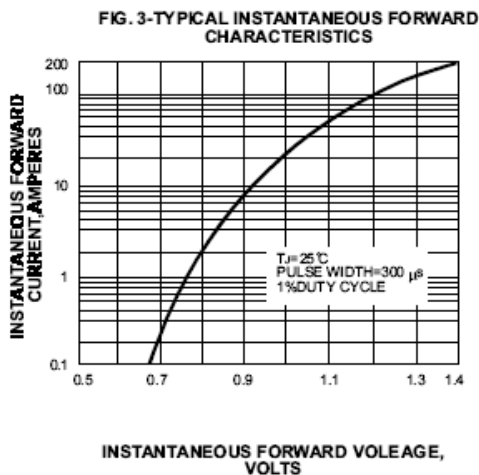
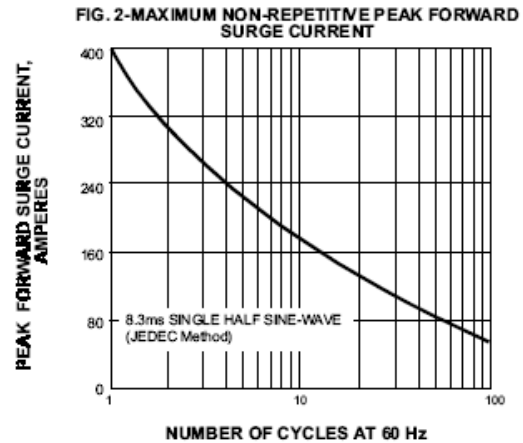
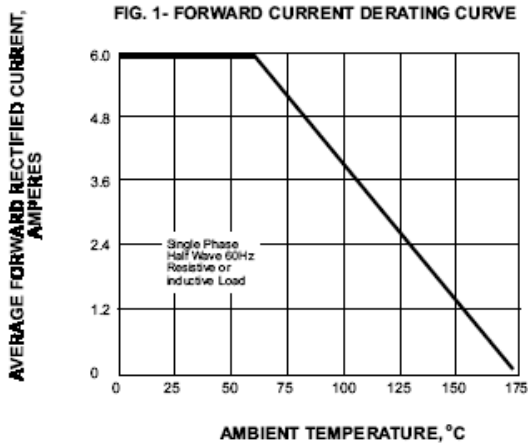
Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	6A05	6A1	6A2	6A4	6A6	6A8	6A10	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current 0.375"(9.5mm) lead length at $T_A=60^\circ\text{C}$	$I_{(AV)}$	6.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	400							Amps
Maximum instantaneous forward voltage at 6.0A	$V_F$	0.95							Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	$I_R$	10.0 400							$\mu\text{A}$
Typical junction capacitance (NOTE 1)	$C_J$	150							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	10.0							$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-65 to +175							$^\circ\text{C}$

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted



### RATINGS AND CHARACTERISTIC CURVES 6A05 THRU 6A10



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