## 6A05 THRU 6A10

# **GENERAL PURPOSE PLASTIC SILICON RECTIFIERS** Reverse Voltage - 50 to 1000 V Forward Current - 6 A

#### **Features**

· High surge current capability

#### **Mechanical Data**

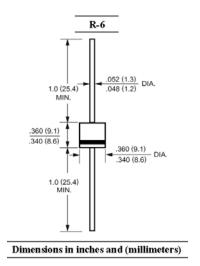
• Case: Molded plastic, R-6

• Epoxy: UL 94V-0 rate flame retardant

• Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed

• Polarity: Color band denotes cathode end

• 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	6A05	6A1	6A2	6A4	6A5	6A6	6A8	6A10	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	500	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	350	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	500	600	800	1000	V
Maximum Average Forward Rectified Current 0.375" (9.5 mm) Lead Length at T <sub>A</sub> = 60 °C	I <sub>F(AV)</sub>	6								А
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	400							А	
Maximum Forward Voltage at 6 A	V <sub>F</sub>	1.1							V	
Maximum Reverse Current $T_A = 25$ °C at Rated DC Blocking Voltage $T_A = 100$ °C	I <sub>R</sub>	10 1000							μA	
Typical Junction Capacitance 1)	CJ	150							pF	
Typical Thermal Resistance 2)	$R_{\theta JA}$	10							°C/W	
Operating Junction Temperature Range	TJ	- 55 to + 150							°C	
Storage Temperature Range	T <sub>Stg</sub>	- 55 to + 150							°C	

<sup>1)</sup> Measured at 1 MHz and applied reverse voltage of 4 V D.C.



Dated: 18/04/2012 H

<sup>&</sup>lt;sup>2)</sup> Thermal resistance from junction to ambient 0.375"(9.5 mm) lead length P.C.B mounted with 1.1 X 1.1" (30 X 30 mm) copper pads.

