6A05 THRU 6A10

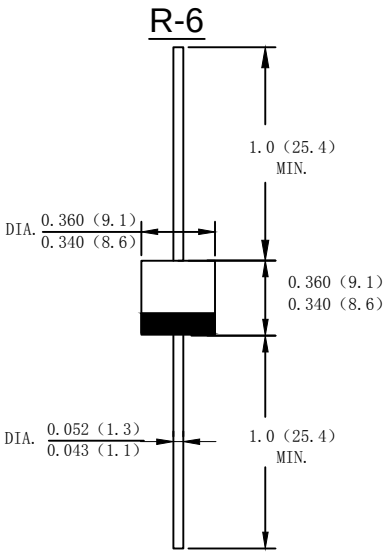
6.0 AMP. Plastic Silicon Rectifiers

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: Molded plastic R-6
- Terminals: Plated leads solderable per MIL-STD-202,Method 208 guaranteed
- Polarity: Color band dentes cathode end
- Mounting Position: Any
- Making: Type Number
- Lead Free: For RoHS/Lead Free Version



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified

Single phase,half wave,60Hz,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_{RM}	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
Average Rectified Output Current (Note 1) @T_L=100℃	IF(AV)	6.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	250							A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	259.375							A^2s
Forward Voltage @IF=6.0A	V_{FM}	1.1							V
Peak Reverse Current @T_A=25℃	I_R	5.0							uA
At Rated DC Blocking Voltage @T_A=125℃		100							
Typical Junction Capacitance (Note 2)	C_J	90							pF
Typical Thermal Resistance Junction to Ambient(Note 1)	$R_{\theta JA}$	35							℃/W
Operating Temperature Range	T_J	-55 to +125							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

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FIG. 1 – FORWARD CURRENT DERATING CURVE

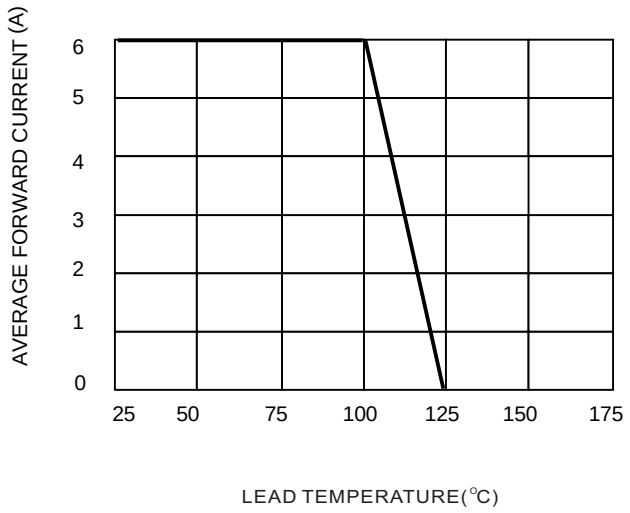


FIG.2-TYPICAL FORWARD CHARACTERISTICS

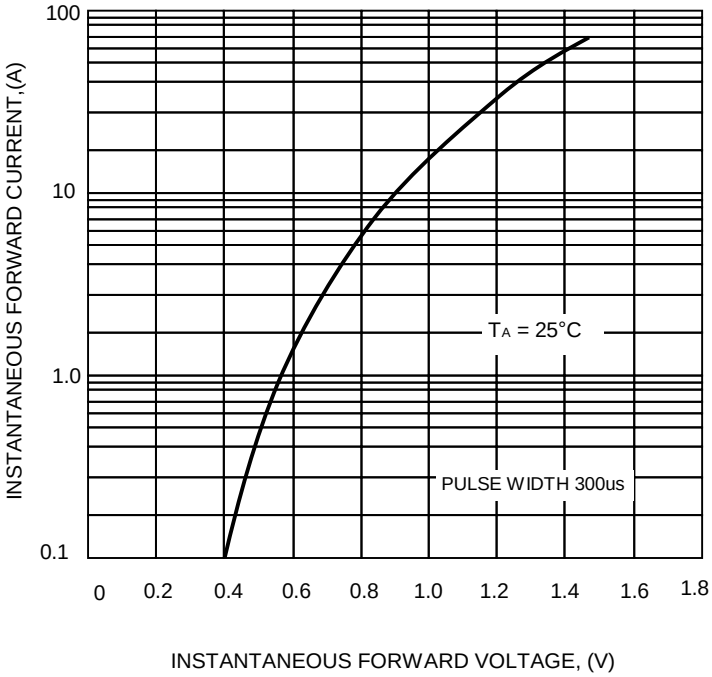


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

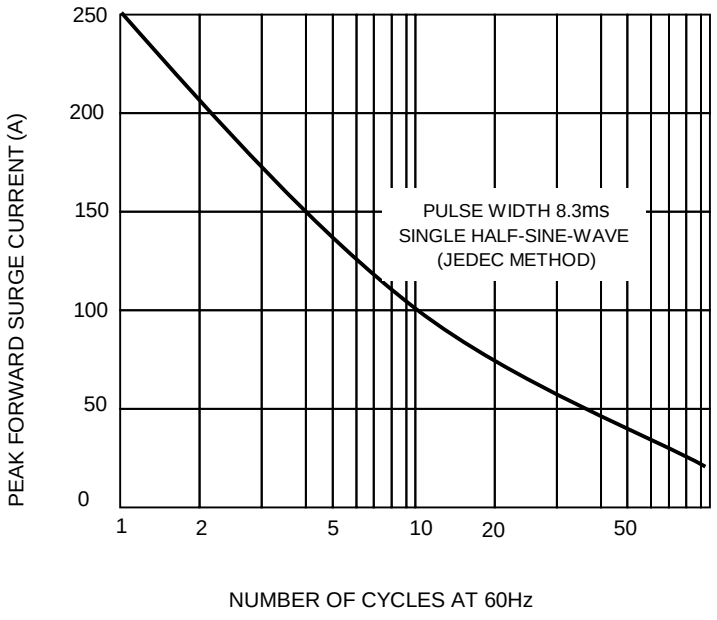
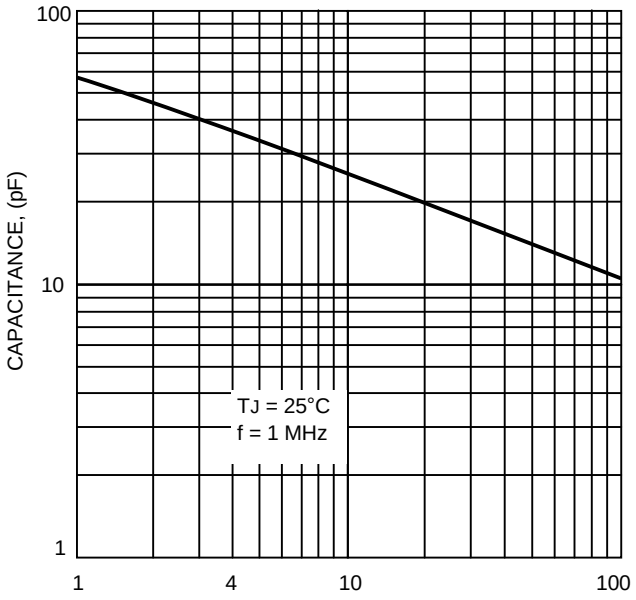


FIG.4 – TYPICAL JUNCTION CAPACITANCE



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