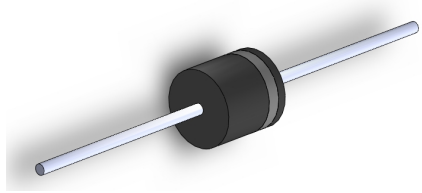
6A05 - 6A10

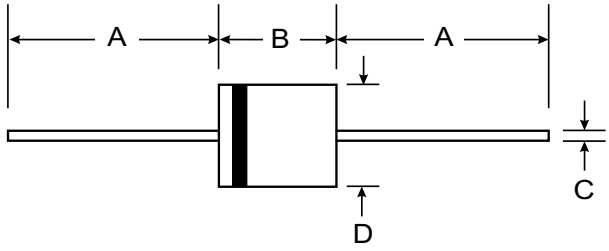
AXIAL LEADED SILICON RECTIFIER DIODES

VOLTAGE RANGE: 50 - 1000V
CURRENT: 6.0 A



Features

- Diffused Junction
- High Current Capability and Low Forward Voltage Drop
- Low Reverse Leakage Current
- Plastic Material - UL Flammability Classification 94V-0



R-6		
Dim	**Min**	**Max**
A	25.4	—
B	8.6	9.1
C	1.2	1.3
All Dimensions in mm		

Mechanical Data

- Case:R-6 , Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 2.1 grams (approx)
- Marking: Type Number

RoHS COMPLIANT

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	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 DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 9.5mm lead length @ T_A = 75°C (See Fig. 1)	$I_{(AV)}$	6.0							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	400							A
Maximum Instantaneous Forward Current at 6.0A DC	V_F	0.90							V
Maximum DC Reverse Current @ T_A = 25°C at Rated Blocking Voltage @ T_A = 100°C	I_R	10 100							μA
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175							°C

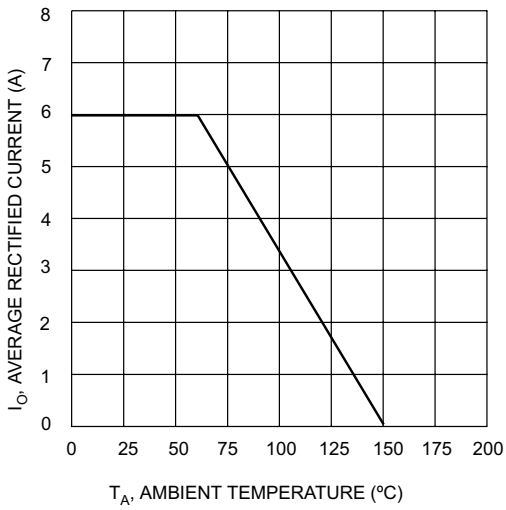


Fig. 1 Forward Current Derating Curve

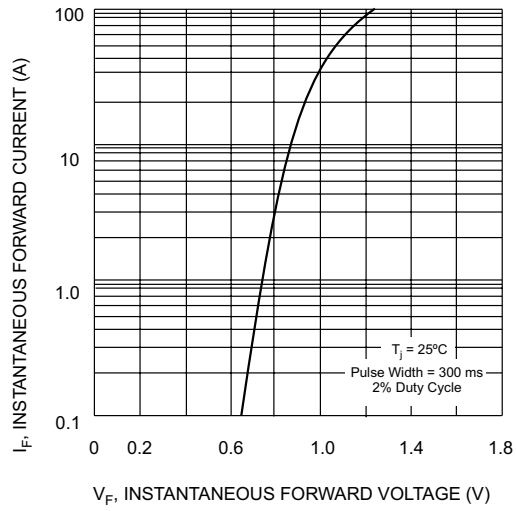


Fig. 2, Typical Forward Characteristics

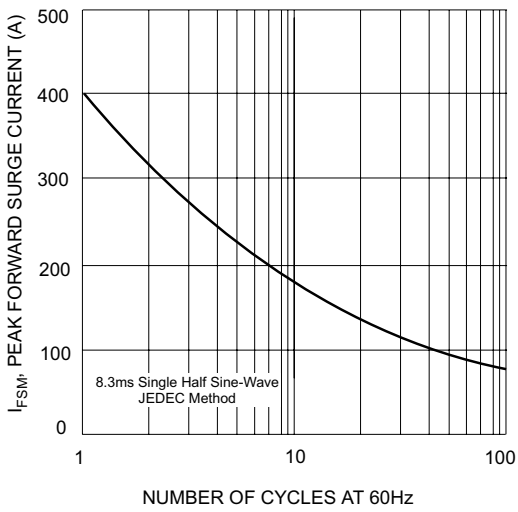


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

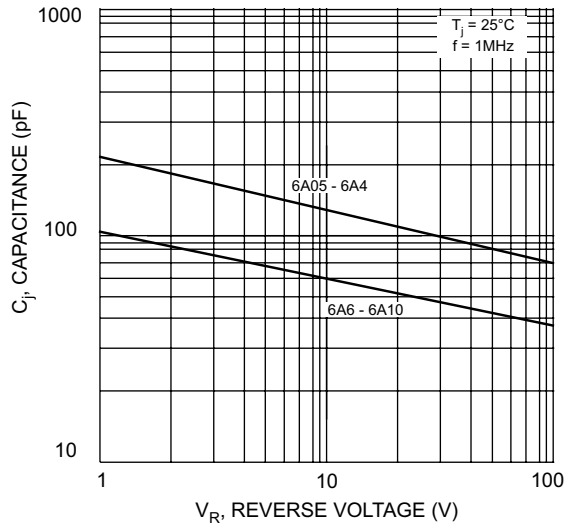


Fig. 4 Typical Junction Capacitance