

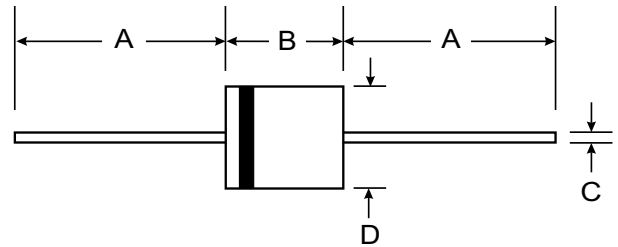
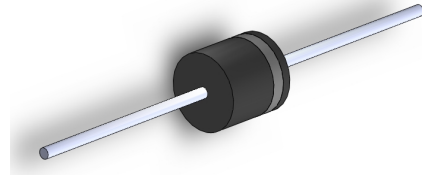
**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 6.0 A**

### Features

- Diffused Junction
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 400A Peak
- Low Reverse Leakage Current
- Plastic Material - UL Flammability Classification 94V-0

### 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



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

### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

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

Characteristic	Symbol	6A01	6A02	6A03	6A04	6A05	6A06	6A07	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) <span style="float: right;">@ T<sub>A</sub> = 60°C</span>	$I_O$	6.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	400							A
Forward Voltage <span style="float: right;">@ I<sub>F</sub> = 6.0A</span>	$V_{FM}$					1.0			V
Peak Reverse Current <span style="float: right;">@ T<sub>A</sub> = 25°C @ T<sub>A</sub> = 100°C</span> at Rated DC Blocking Voltage	$I_{RM}$					10 1.0			μA mA
Typical Junction Capacitance (Note 2)	$C_j$	140				70			pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$					15			K/W
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150							°C

- Notes: 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 DC.

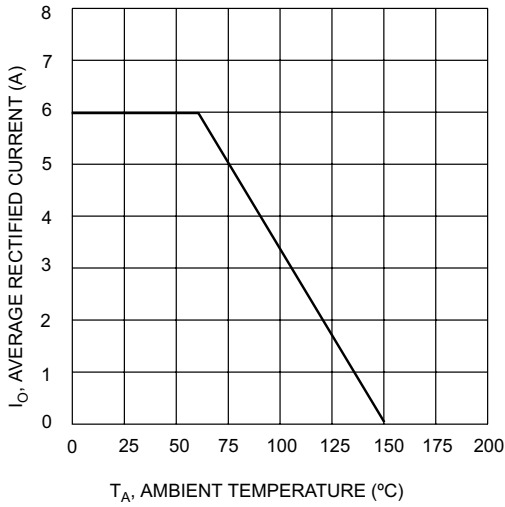


Fig. 1 Forward Current Derating Curve

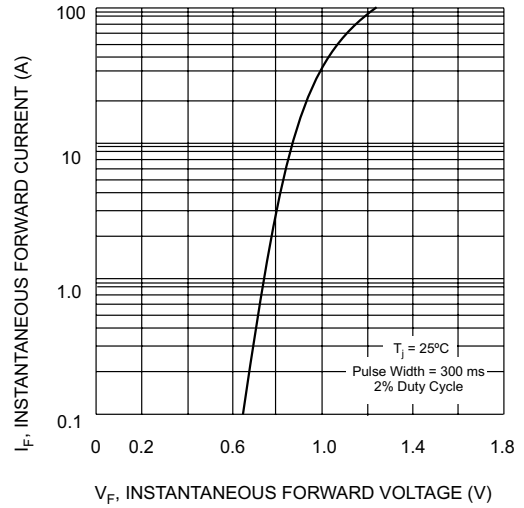


Fig. 2, Typical Forward Characteristics

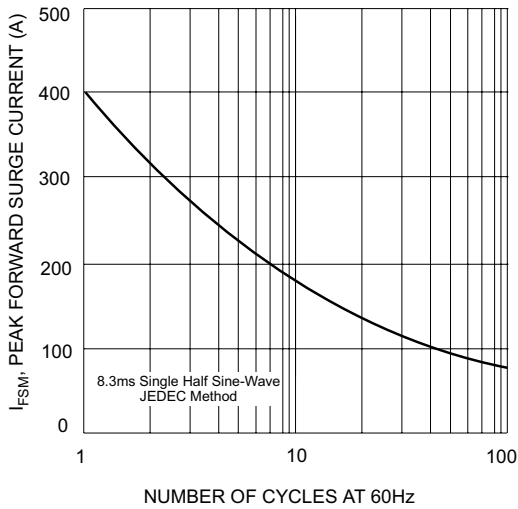


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

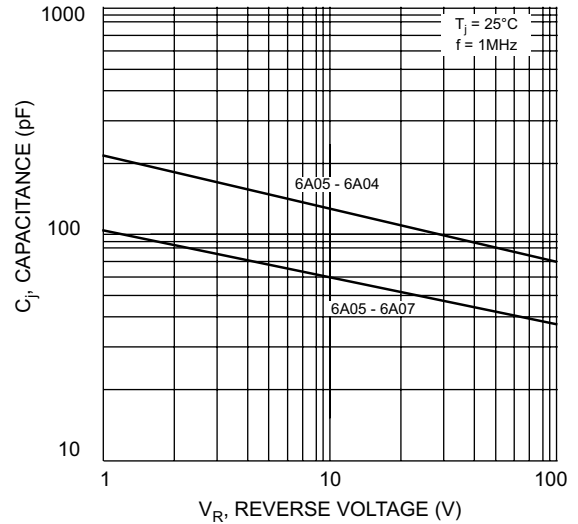


Fig. 4 Typical Junction Capacitance