

General Purpose Plastic Rectifiers
Reverse Voltage 50 to 1000 Volts Forward Current 6.0 Amperes

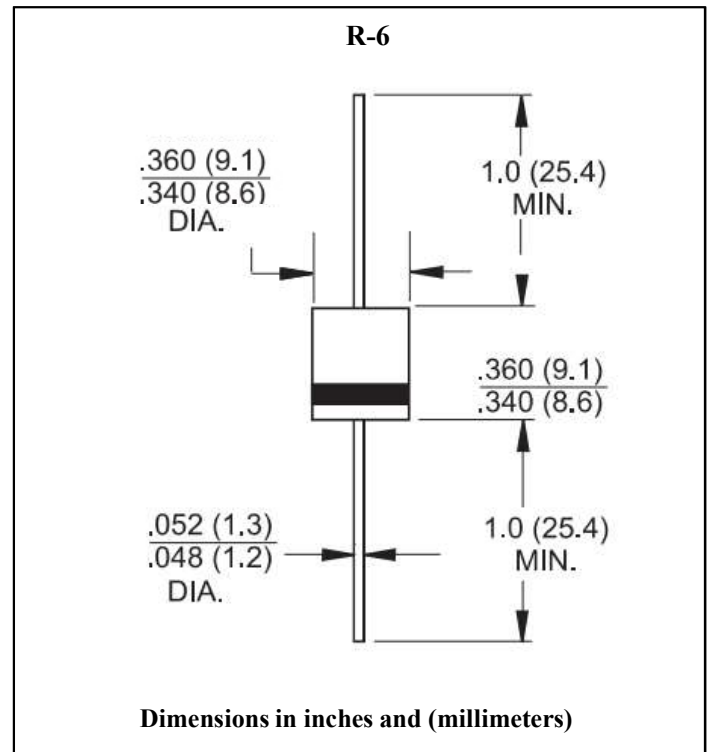
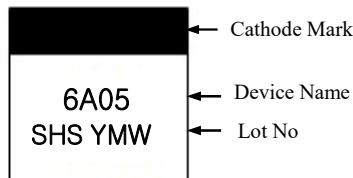
Features

- Low forward voltage drop
- High current capability
- High reliability
- 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
- High temperature soldering guaranteed : 260°C/10 seconds /0.375", (9.5mm) lead lengths at 5lbs., (2.3kg) tension
- Weight : 2.1 grams

Marking



Maximum Ratings & 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	Symbol	6A05	6A10	6A20	6A40	6A60	6A80	6A100	Unit	Remark
Maximum Repetitive 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 0.375" (9.5mm) Lead Length	$I_F(AV)$	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 Voltage @ 6.0A	V_F	1.0							V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	10							uA	Ta=25°C
		400							uA	Ta=100°C
Maximum Full Load Reverse Current, Full Cycle Average 0.375" (9.5mm) Lead Length	$I_{R(AV)}$	50							uA	Ta=75°C
Typical Junction Capacitance	C_J	100							pF	Note 1
Typical Thermal Resistance	Rth(j-a)	10							°C /W	Note 2
Operation Junction Temperature Range	T_J	-55 to +125							°C	
Storage Temperature Range	T_{STG}	-55 to +150							°C	

Note 1. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C.

Note 2. Thermal Resistance from Junction to Ambient .375" (9.5mm) Lead Length

Ratings and Characteristics Curves ($T_a=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

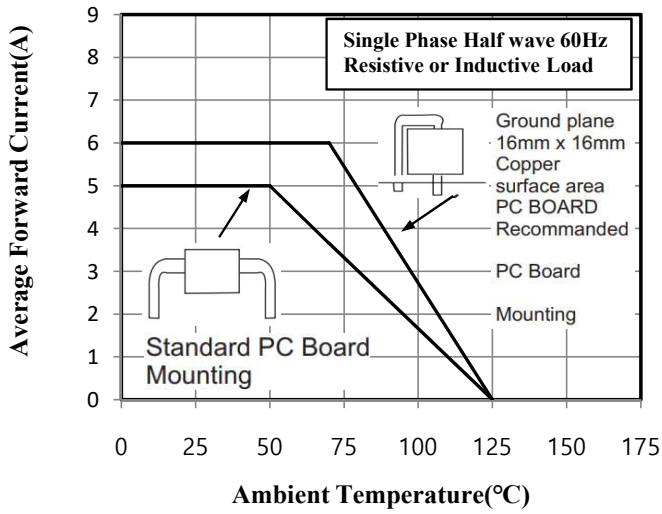


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

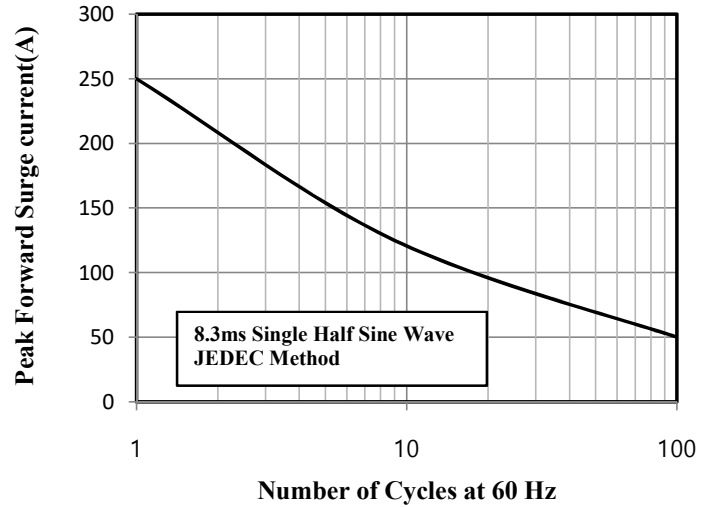


Fig.3 Typical Instantaneous Forward Characteristics

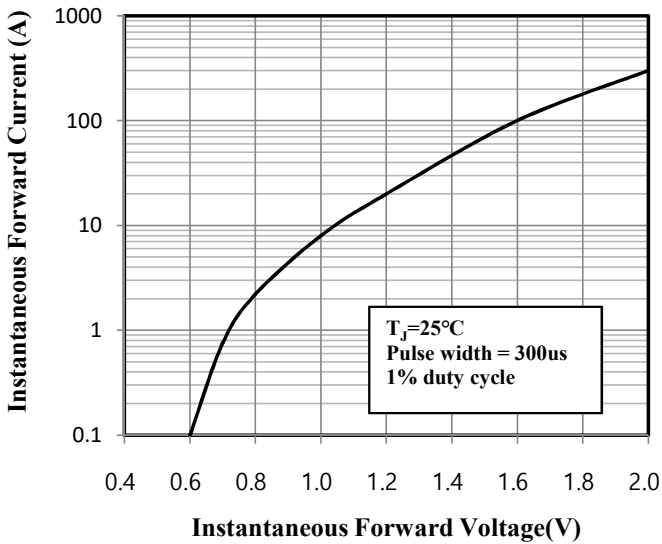


Fig.4 Typical Junction Capacitance

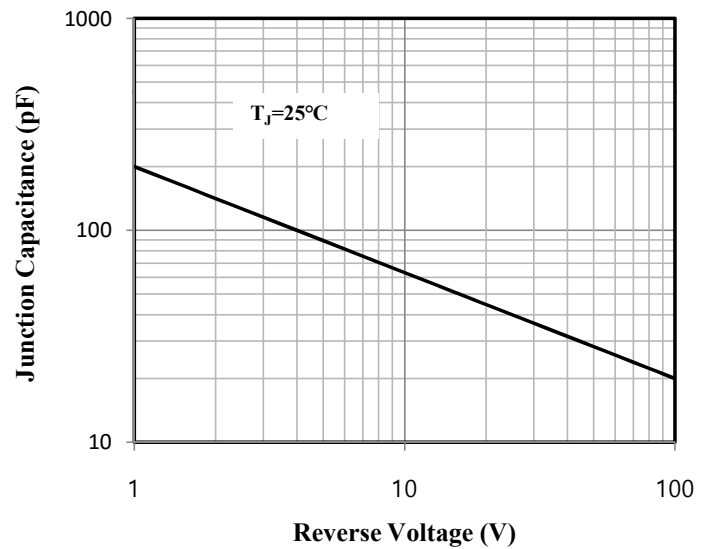


Fig.5 Typical Reverse Characteristics

