

**Plastic Silicon Rectifiers****Reverse Voltage - 50 to 1000Volts
Forward Current - 6.0 Amperes****Features**

- Low cost
- Low reverse leakage current
- Low forward voltage drop
- High surge capacity
- Meet UL flammability classification 94V-0

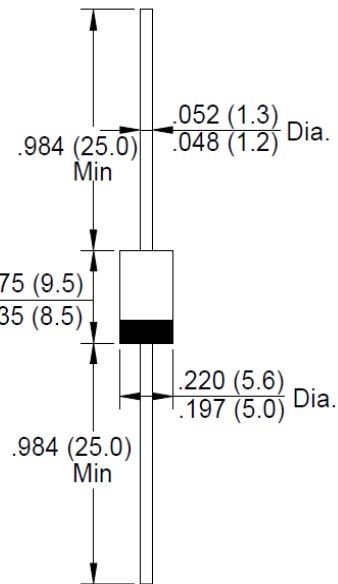
Mechanical Data

- Case: JEDEC DO-27 molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

Applications

- For use in low voltage, high frequency inverters, polarity protection applications

DO-27**RoHS
COMPLIANT**

Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	6A05S	6A1S	6A2S	6A4S	6A6S	6A8S	6A10S	Unit
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 @ $T_A=60^\circ\text{C}$	$I_{(AV)}$	6.0							A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I_{FSM}	240							A
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	239							A^2s
Peak Forward Voltage at 6.0A DC (Note1)	V_F	1.0							V
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_J=100^\circ\text{C}$	I_R	10 100							μA
Operating Junction Temperature Range	T_J	-55 to +125							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$



Fig. 1 - Forward Current Derating Curve

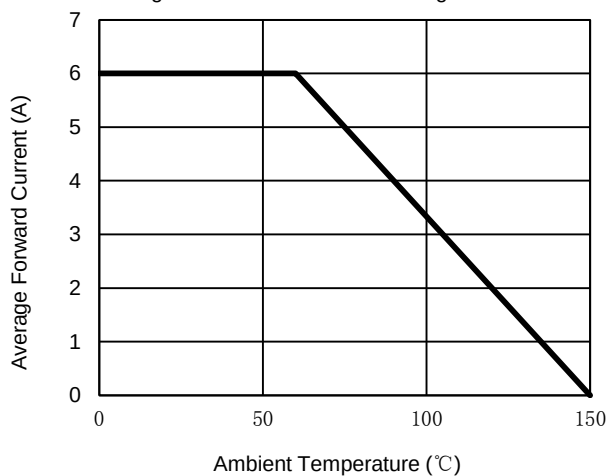


Fig. 2 - Maximum Non-Repetitive Surge Current

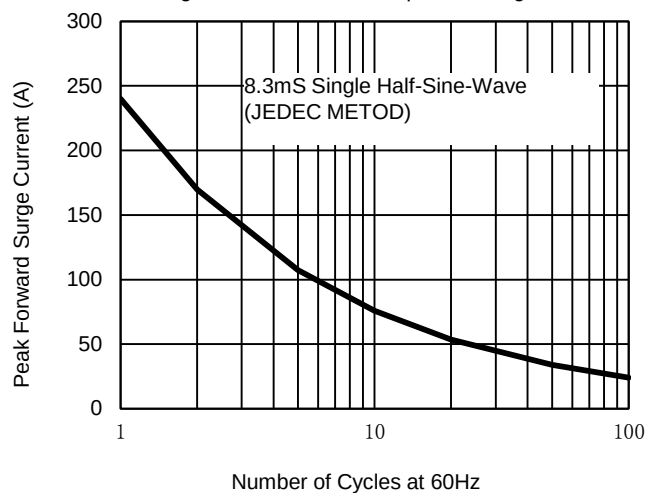


Fig. 3 - Typical Reverse Characteristics

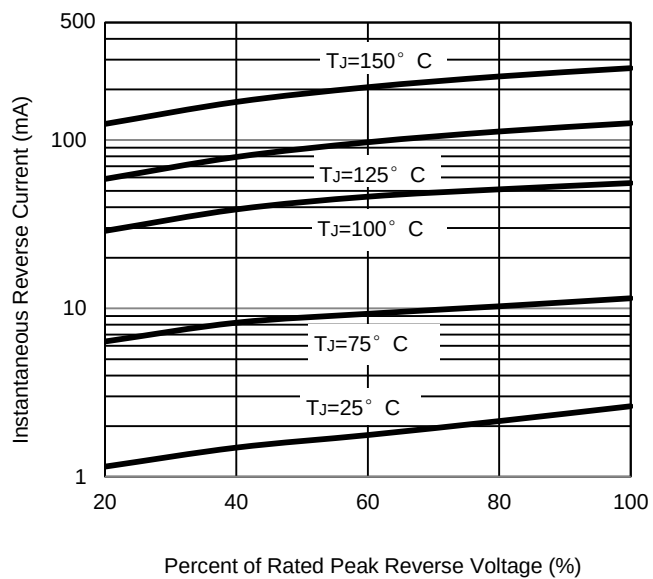
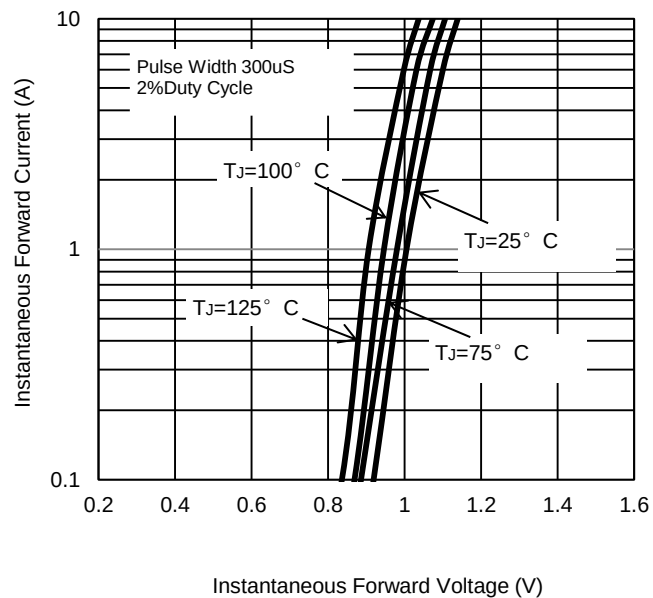


Fig. 4 - Typical Forward Characteristics





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