

Surface Mount Glass Passivated Rectifier



Features:

- Glass passivated chip
- For surface mounted applications
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0

Mechanical Data:

Case	: Molded Plastic
Polarity	: Indicated by cathode band
Weight	: 0.002 ounces, 0.053 grams
Mounting Position	: Any
Reverse Voltage	: 50 to 1000 Volts
Forward Current	: 1 Ampere

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%.

Type Number	Symbol	S1A	S1B	S1D	S1G	S1J	S1K	S1M	Unit
Max. Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Max. RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	
Max. DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	
Max. Average Forward Rectified Current $T_A = 50^\circ\text{C}$	$I_{(AV)}$	1							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30							
Peak Forward Voltage at 1.0A DC	V_F	1.1							V
Max. DC Reverse Current at Rated DC Blocking Voltage at $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	I_R	5 100							μA
Typical Junction Capacitance (Note 1)	C_J	10							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	30							$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}								

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance junction to ambient.
3. The typical data above is for reference only

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Ratings and Characteristic Curves

FIG. 1 - FORWARD CURRENT DERATING CURVE

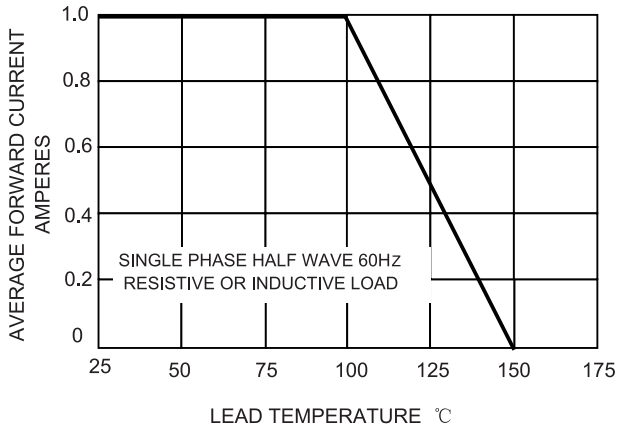


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

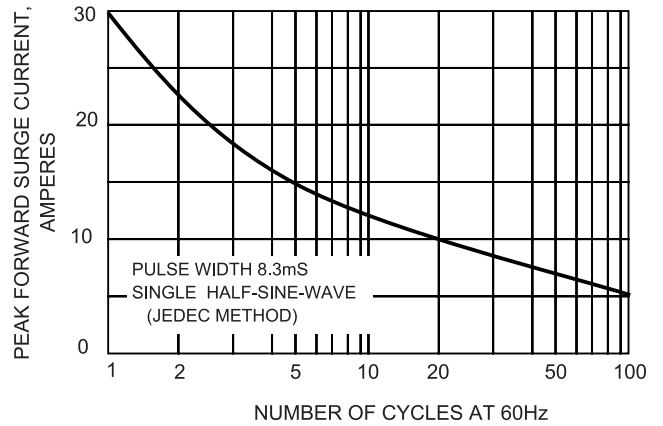


FIG.3-TYPICAL FORWARD CHARACTERISTICS

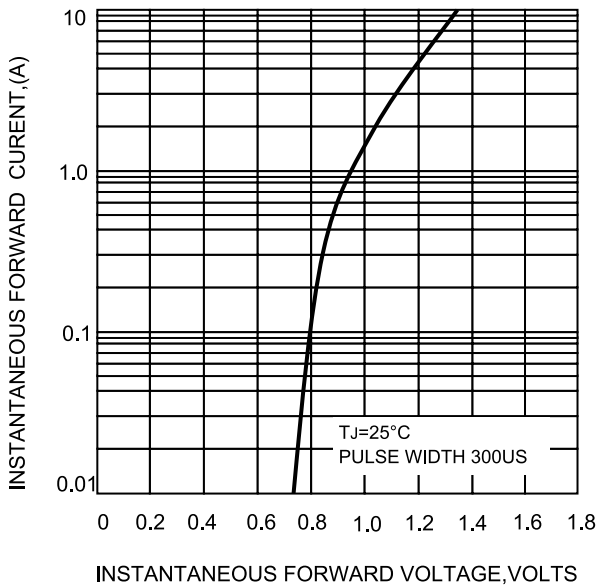
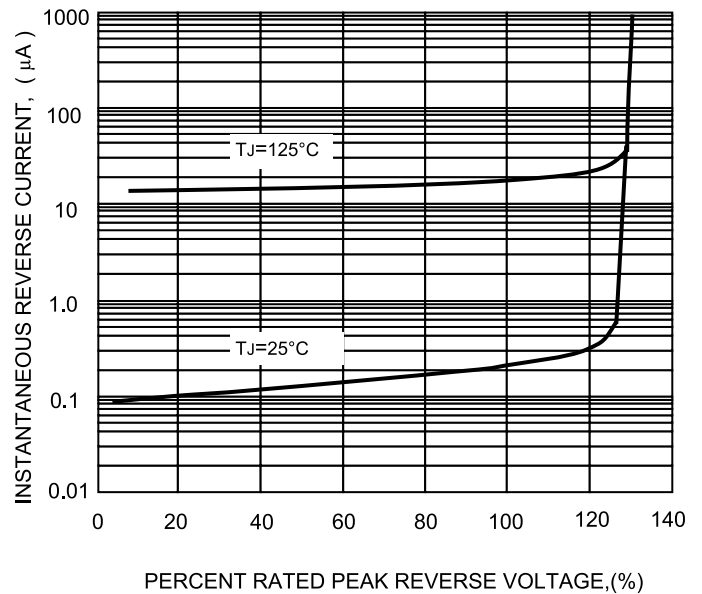


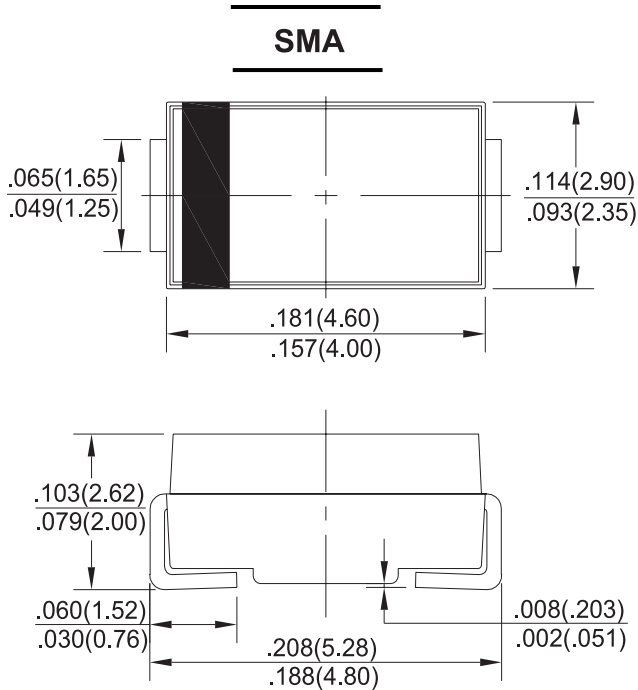
FIG.4-TYPICAL REVERSE CHARACTERISTICS



Surface Mount Glass Passivated Rectifier



Dimensions:



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Surface Mount Glass Passivated Rectifiers	S1A
	S1B
	S1D
	S1G
	S1J
	S1K
	S1M

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