

# 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%.

Characteristics	Symbol	S1A+	S1B+	S1D+	S1G+	S1J+	S1K+	S1M+	Unit
Max. Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Max. RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	
Max. DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	
Max. Average Forward Rectified Current T <sub>A</sub> = 50°C	I <sub>(AV)</sub>	1							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	30							
Peak Forward Voltage at 1.0A DC	V <sub>F</sub>	1.1							V
Max. DC Reverse Current at Rated DC Blocking Voltage at T <sub>A</sub> = 25°C T <sub>A</sub> = 100°C	I <sub>R</sub>	5 100							μA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	10							pF
Typical Thermal Resistance (Note 2)	R <sub>θJC</sub>	30							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>								

## 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

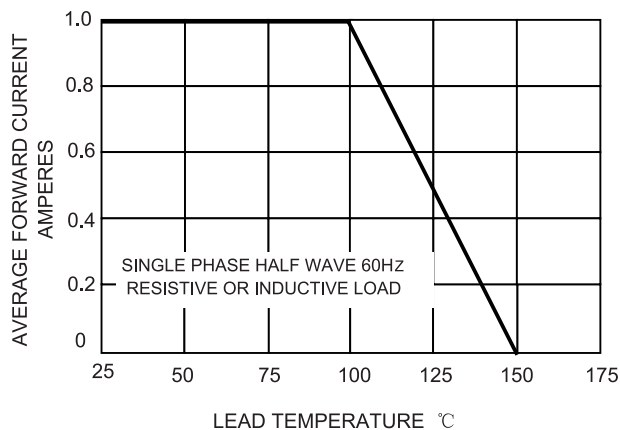


FIG.2 - MAXIMUM NON-REPETITIVE  
SURGE CURRENT

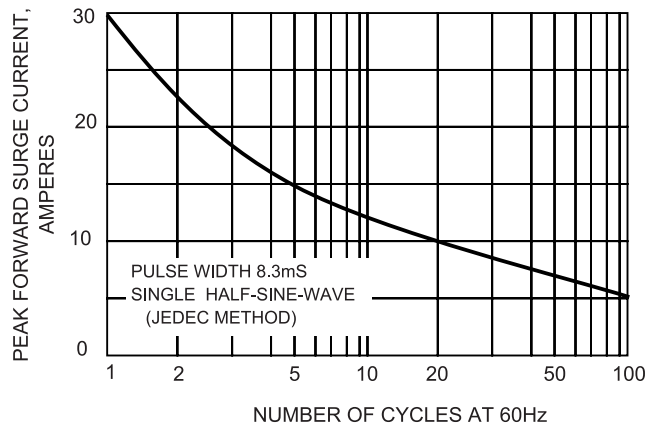


FIG.3-TYPICAL FORWARD CHARACTERISTICS

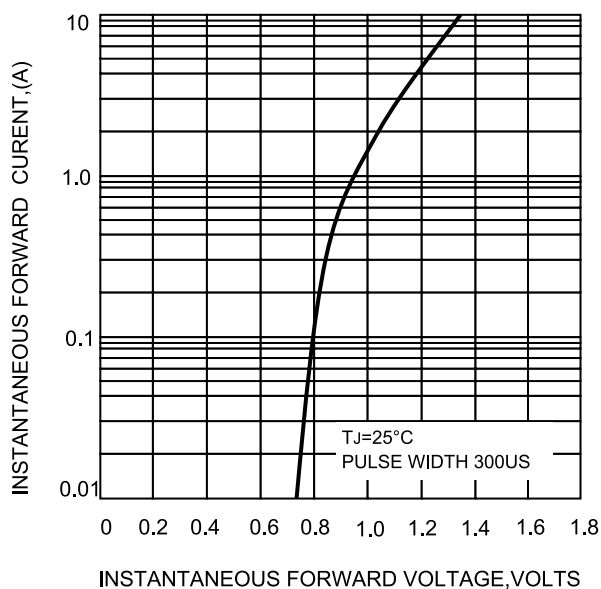
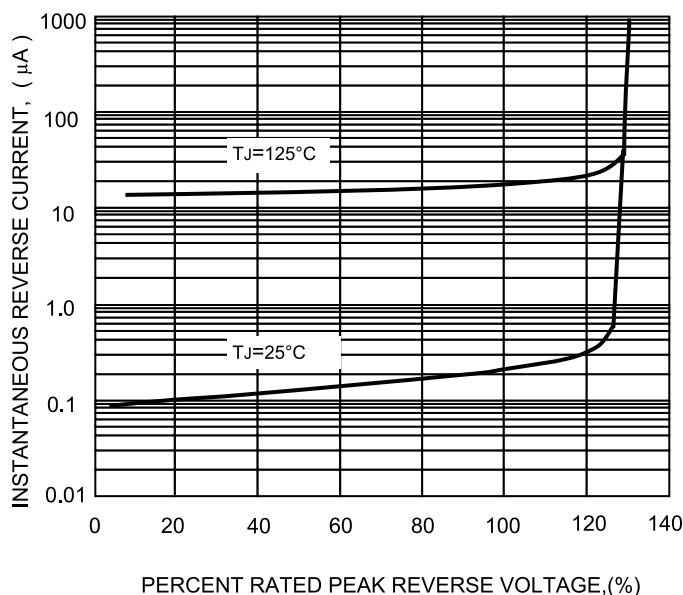


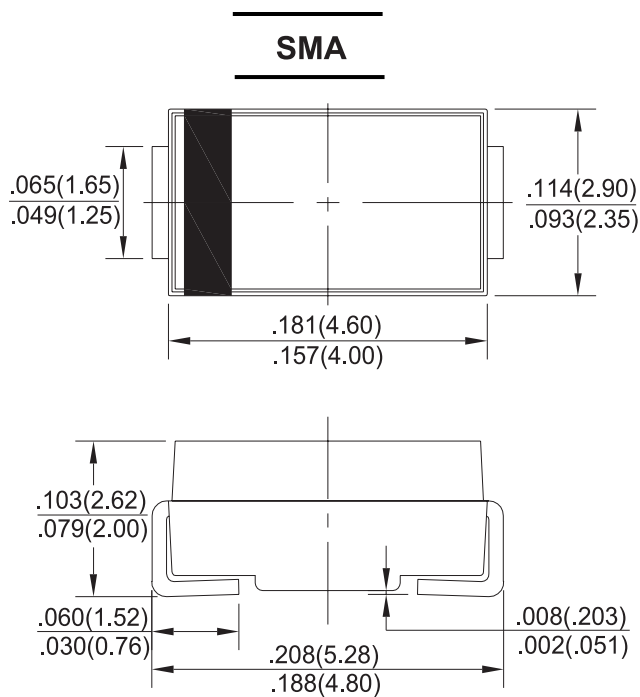
FIG.4-TYPICAL REVERSE CHARACTERISTICS



# 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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