

# Surface Mount Fast Recovery Glass Passivated Rectifier



## Features:

- Fast switching for high efficiency
- Low cost
- Diffused junction
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

## Mechanical Data:

Case	: Molded Plastic
Polarity	: Indicated by cathode band
Weight	: 0.002 ounces, 0.053 grams
Mounting Position	: Any
Reverse Voltage	: 800 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	Values	Unit
Max. Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	800	V
Max. RMS Voltage	V <sub>RMS</sub>	560	
Max. DC Blocking Voltage	V <sub>DC</sub>	800	
Max. Average Forward Rectified Current @T <sub>A</sub> =75°C	I <sub>(AV)</sub>	1	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	30	
Peak Forward Voltage at 1A DC	V <sub>F</sub>	1.3	V
Max. DC Reverse Current at Rated DC Blocking Voltage at	I <sub>R</sub>	T <sub>A</sub> = 25°C 5	µA
		T <sub>A</sub> = 125°C 100	
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	500	nS
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	15	pF
Typical Thermal Resistance (Note 3)	R <sub>θJA</sub>	25	°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

## Notes:

1. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1A, I<sub>RR</sub> = 0.25A
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. Thermal resistance junction to ambient.
4. The typical data above is for reference only

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## Ratings and Characteristic Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE

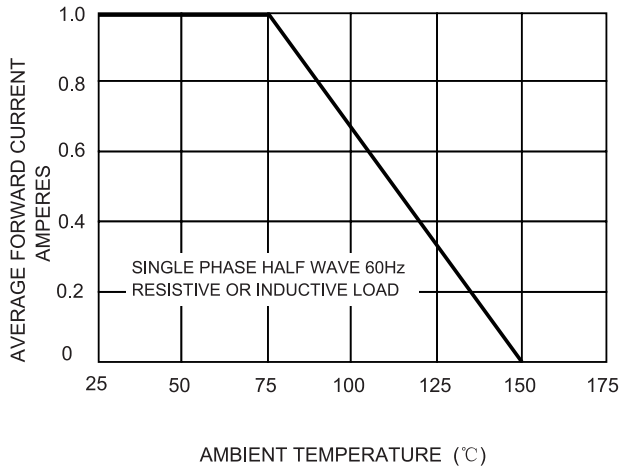


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

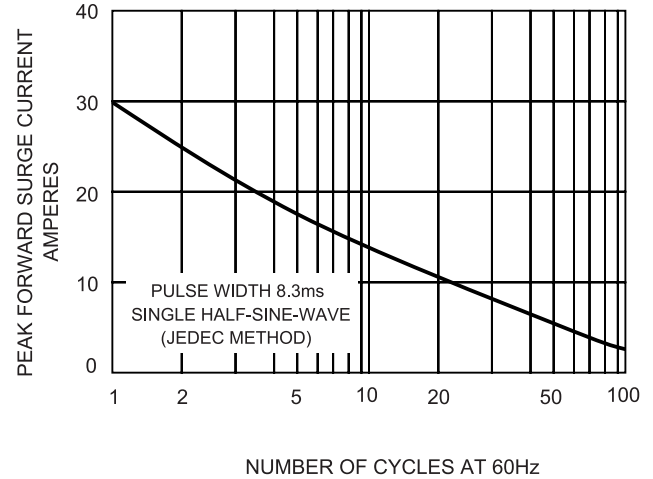


FIG. 3 – TYPICAL JUNCTION CAPACITANCE

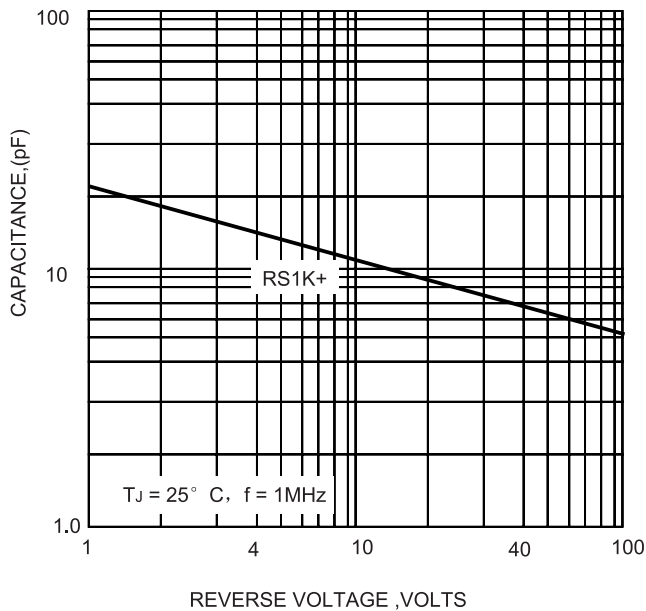
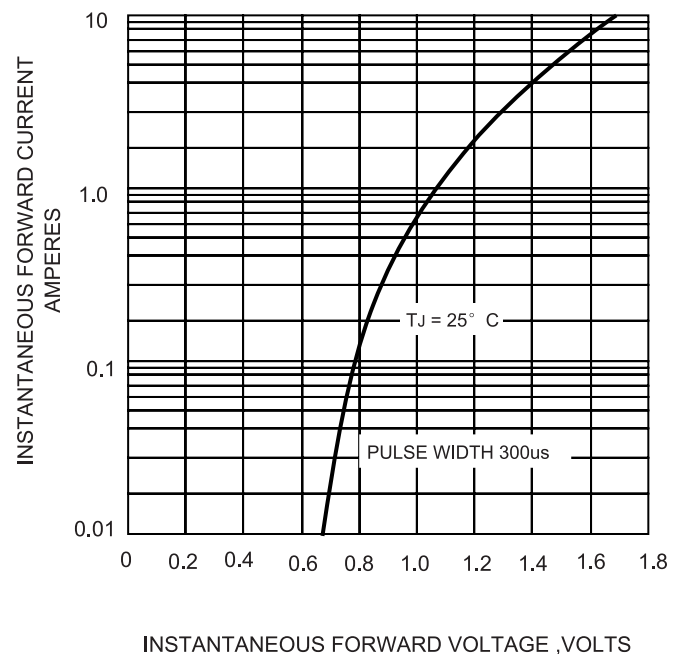


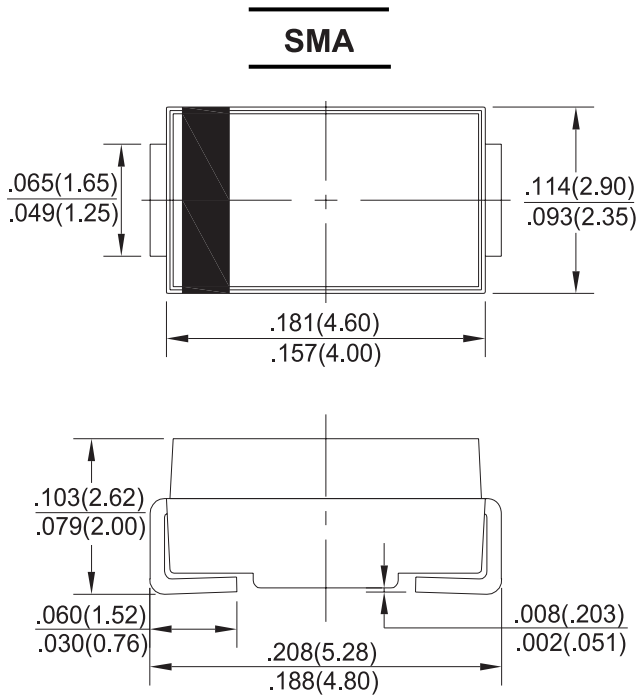
FIG.4-TYPICAL FORWARD CHARACTERISTICS



# Surface Mount Fast Recovery Glass Passivated Rectifier



## Dimensions:



Dimensions : Inches (Millimetres)

## Part Number Table

Description	Part Number
Surface Mount Fast Recovery Glass Passivated Rectifiers, 1A 800V SMA	RS1K+

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