

# Surface Mount Fast Recovery Glass Passivated Rectifier

**multicomp** PRO



## 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 : 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	RS1A+	RS1B+	RS1D+	RS1G+	RS1J+	RS1M+	Unit
Max. Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	1000	V
Max. RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	700	
Max. DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	1000	
Max. Average Forward Rectified Current @T <sub>A</sub> =75°C	I <sub>(AV)</sub>	1.0						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 T <sub>A</sub> = 25°C Rated DC Blocking Voltage at T <sub>A</sub> = 125°C	I <sub>R</sub>	5 100						µA
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	150				250	500	nS
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	25				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

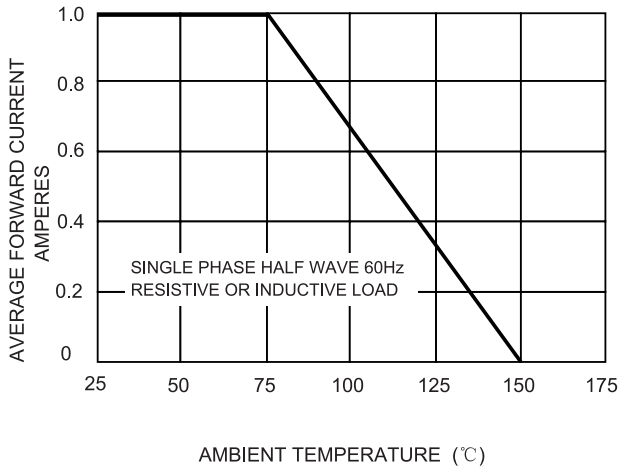


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

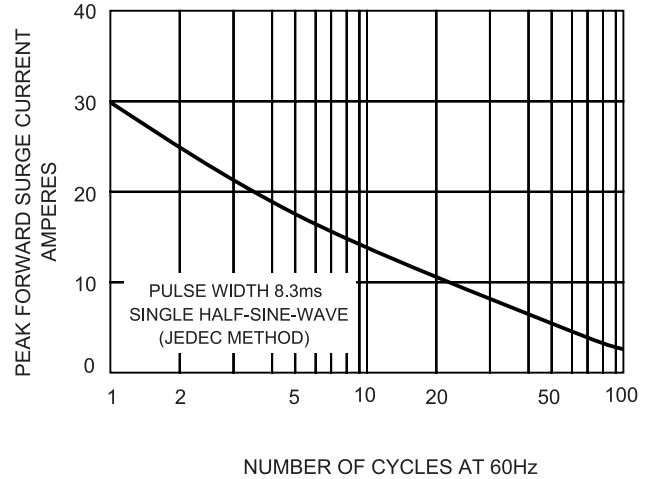


FIG. 3 – TYPICAL JUNCTION CAPACITANCE

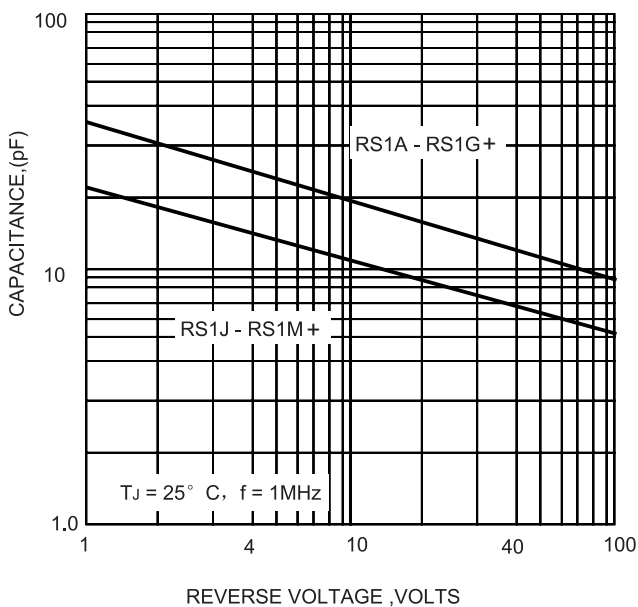
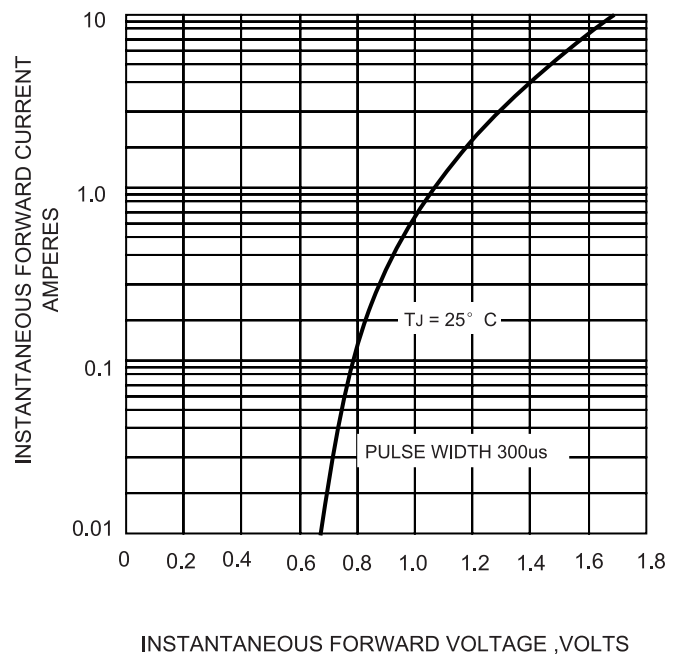


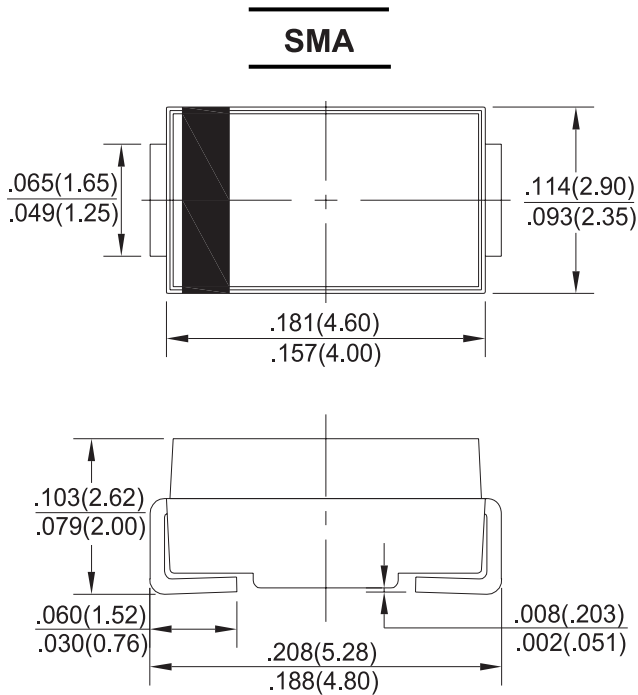
FIG.4-TYPICAL FORWARD CHARACTERISTICS



# Surface Mount Fast Recovery Glass Passivated Rectifier



## Dimensions:



Dimensions : Inches (Millimetres)

## Part Number Table

Description	Part Number
Surface Mount Fast Recovery Glass Passivated Rectifiers	RS1A+
	RS1B+
	RS1D+
	RS1G+
	RS1J+
	RS1M+

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