

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	: Colour band denotes cathode
Weight	: 0.007 ounces, 0.21 grams
Mounting Position	: Any
Reverse Voltage	: 100 to 1000 Volts
Forward Current	: 3 Amperes

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	RS3B+	RS3G+	RS3M+	Unit
Max. Recurrent Peak Reverse Voltage	V _{RRM}	100	400	1000	V
Max. RMS Voltage	V _{RMS}	70	280	700	
Max. DC Blocking Voltage	V _{DC}	100	400	1000	
Max. Average Forward Rectified Current T _A = 50°C	I _(AV)	3			A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	100			
Peak Forward Voltage at 3A DC	V _F	1.3			V
Max. DC Reverse Current at Rated DC Blocking Voltage at T _A = 25°C T _A = 100°C	I _R	5 100			µA
Max. Reverse Recovery Time (Note 1)	T _{rr}	150		500	nS
Typical Junction Capacitance (Note 2)	C _J	65		40	pF
Typical Thermal Resistance (Note 3)	R _{θJA}	15			°C/W
Operating Temperature Range	T _J	-55 to +150			°C
Storage Temperature Range	T _{STG}				

Notes:

1. Measured with $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{RR} = 0.25\text{A}$
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

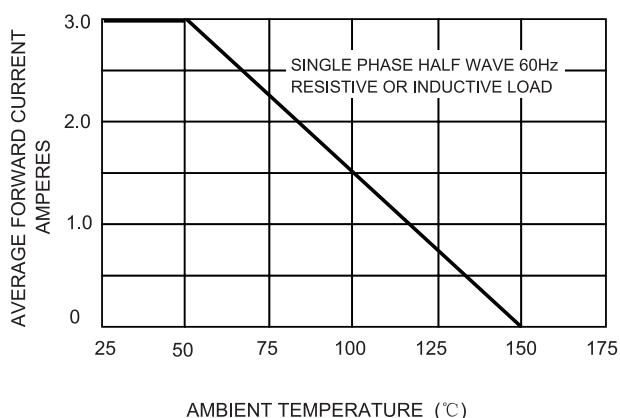


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

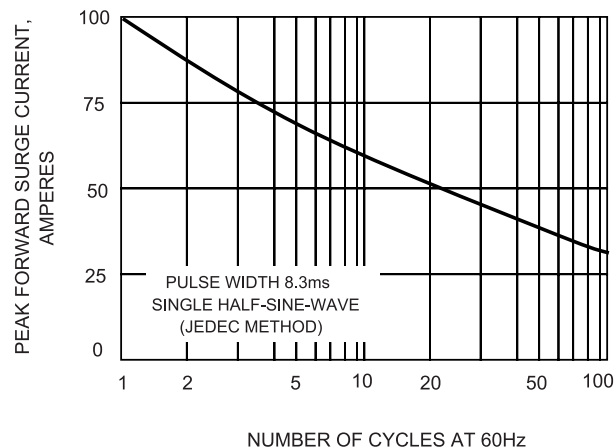


FIG. 3 – TYPICAL JUNCTION CAPACITANCE

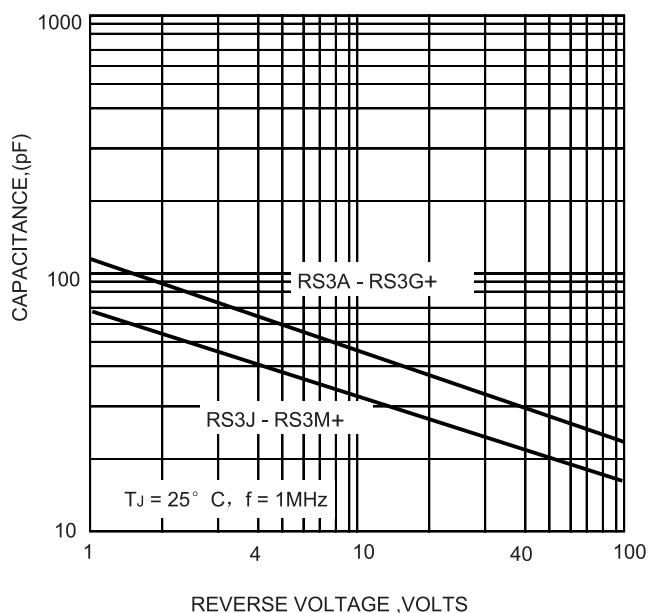
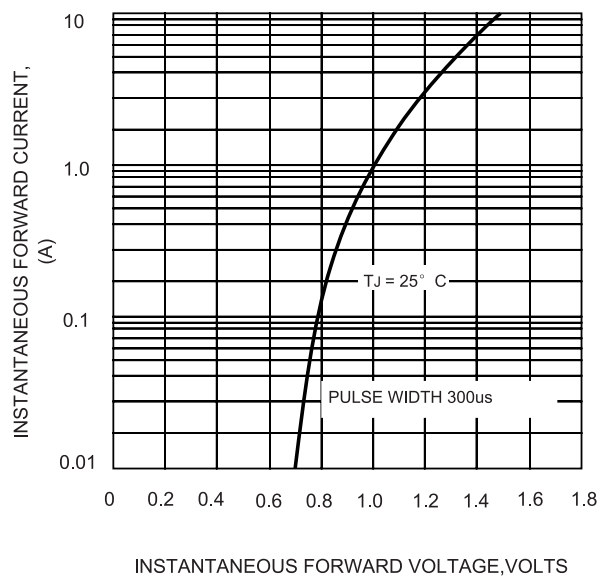


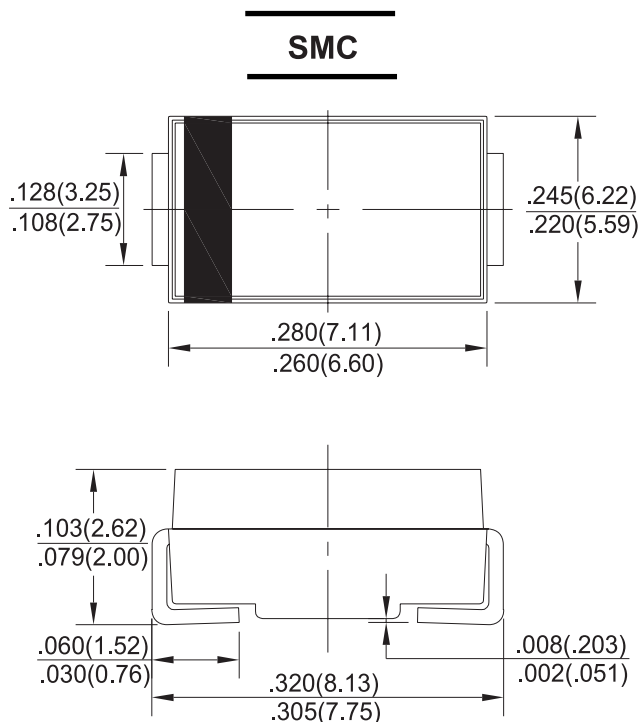
FIG.4-TYPICAL FORWARD CHARACTERISTICS



Surface Mount Fast Recovery Glass Passivated Rectifier



Dimensions:



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Surface Mount Fast Recovery Glass Passivated Rectifiers	RS3B+
	RS3G+
	RS3M+

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