

Surface Mount Fast Recovery Glass Passivated Rectifier

multicompPRO



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_{RRM}	800	V
Max. RMS Voltage	V_{RMS}	560	
Max. DC Blocking Voltage	V_{DC}	800	
Max. Average Forward Rectified Current @ $T_A = 75^\circ C$	$I_{(AV)}$	1	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	30	
Peak Forward Voltage at 1A DC	V_F	1.3	V
Max. DC Reverse Current at $T_A = 25^\circ C$ Rated DC Blocking Voltage at $T_A = 125^\circ C$	I_R	5 100	μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	500	nS
Typical Junction Capacitance (Note 2)	C_J	15	pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	25	$^\circ C/W$
Operating Temperature Range	T_J	-55 to +150	$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ C$

Notes:

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

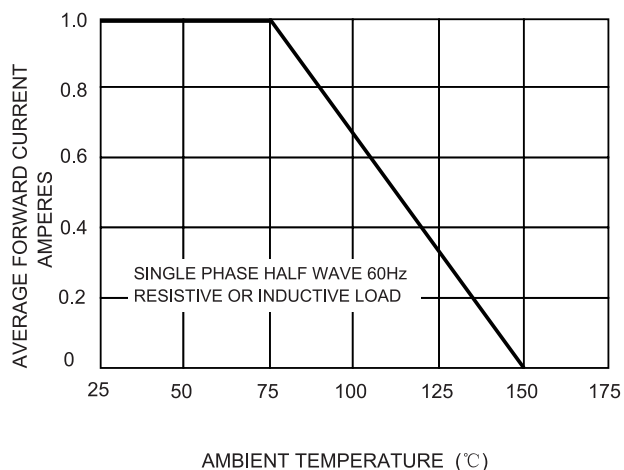


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

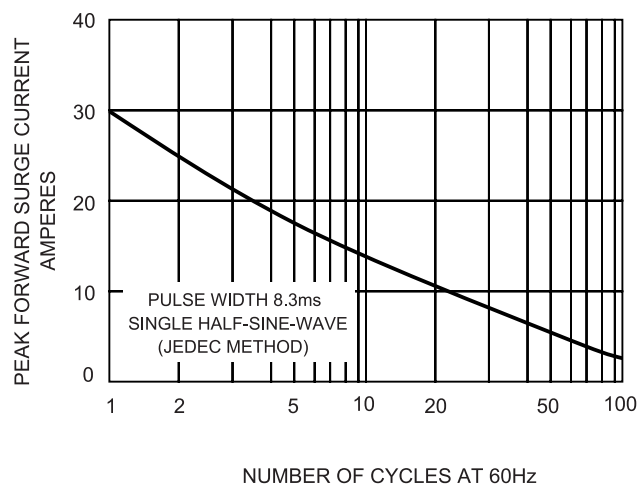


FIG. 3 – TYPICAL JUNCTION CAPACITANCE

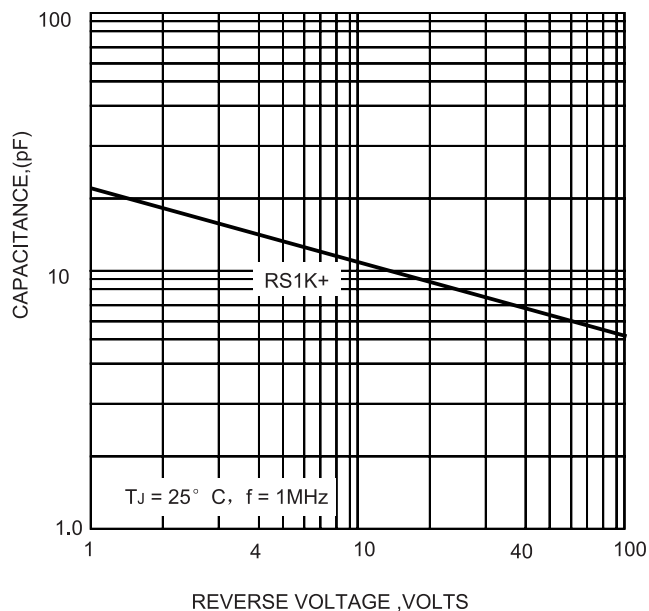
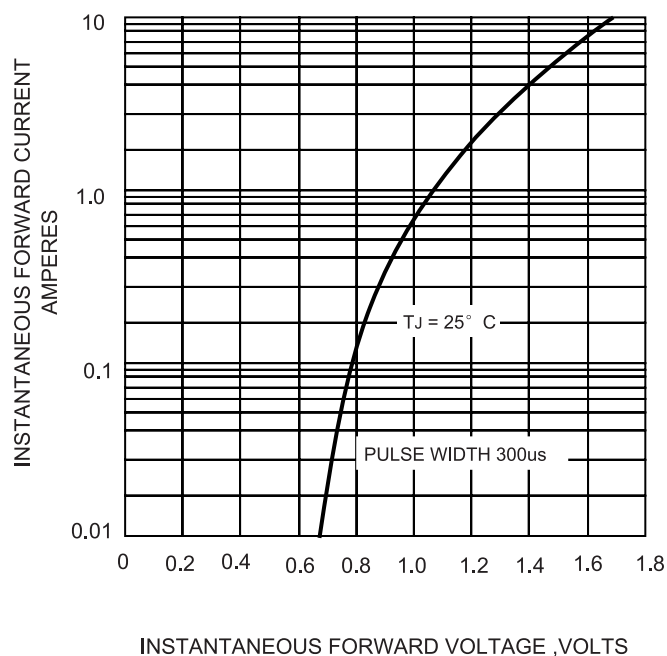


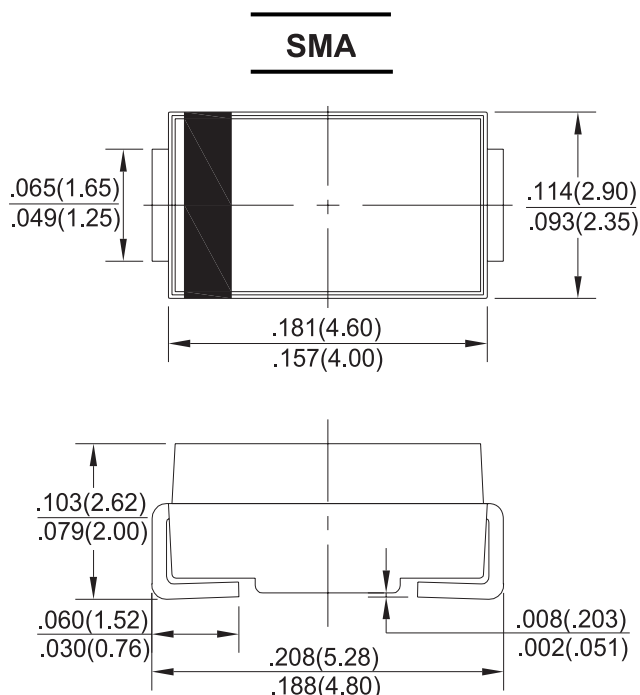
FIG.4-TYPICAL FORWARD CHARACTERISTICS



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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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