

Surface Mount Glass Passivated Rectifier



**RoHS
Compliant**



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 : Colour band denotes cathode
 Weight : 0.007 ounces, 0.21 grams
 Mounting Position : Any
 Reverse Voltage : 50 to 1000 Volts
 Forward Current : 3.0 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	S3A+	S3B+	S3D+	S3G+	S3J+	S3K+	S3M+	Unit
Max. Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Max. RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	
Max. DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	
Max. Average Forward Rectified Current $T_L = 75^\circ\text{C}$	$I_{(AV)}$	3							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Super Imposed on Rated Load (JEDEC method)	I_{FSM}	100							
Peak Forward Voltage at 3A DC	V_F	1.1							V
Max. DC Reverse Current at $T_J = 25^\circ\text{C}$ Rated DC Blocking Voltage at $T_J = 125^\circ\text{C}$	I_R	5 250							μA
Typical Junction Capacitance (Note 1)	C_J	40							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	10							$^\circ\text{C/W}$
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	50							$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}								

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance junction to lead.
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

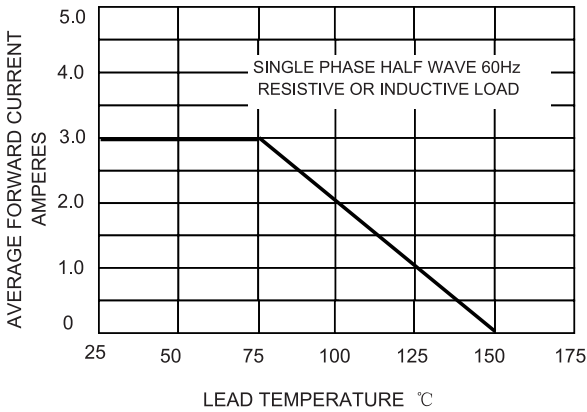


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

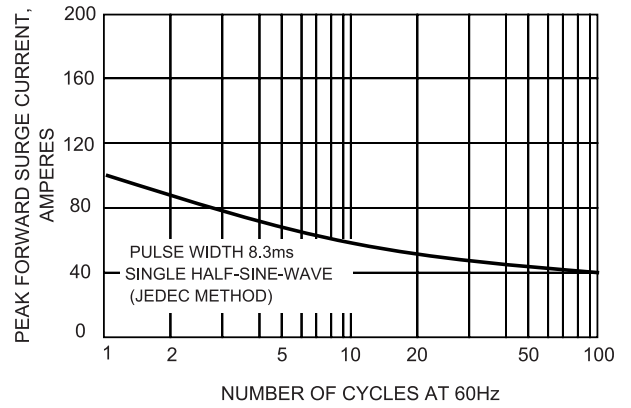


FIG. 3-TYPICAL FORWARD CHARACTERISTICS

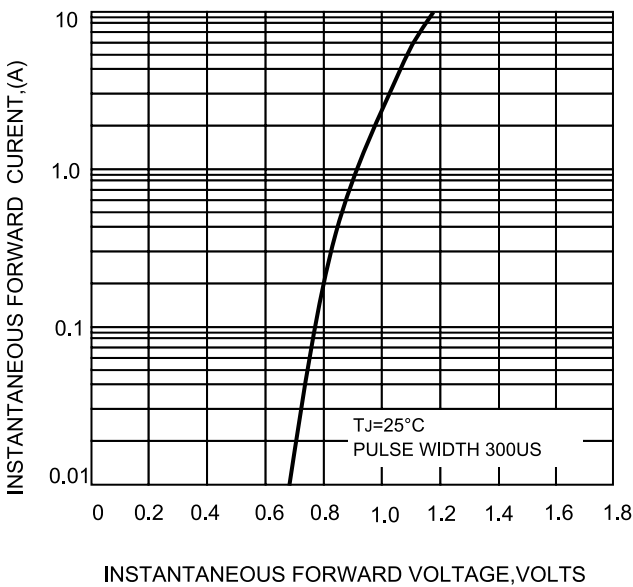
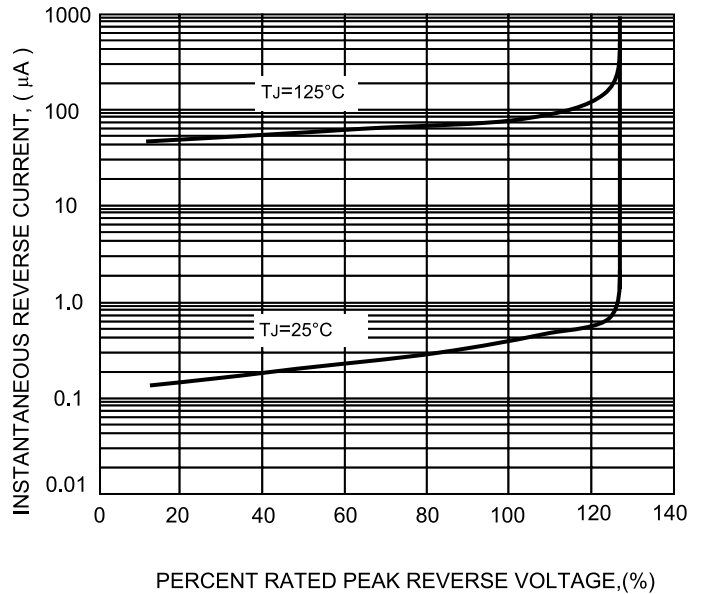


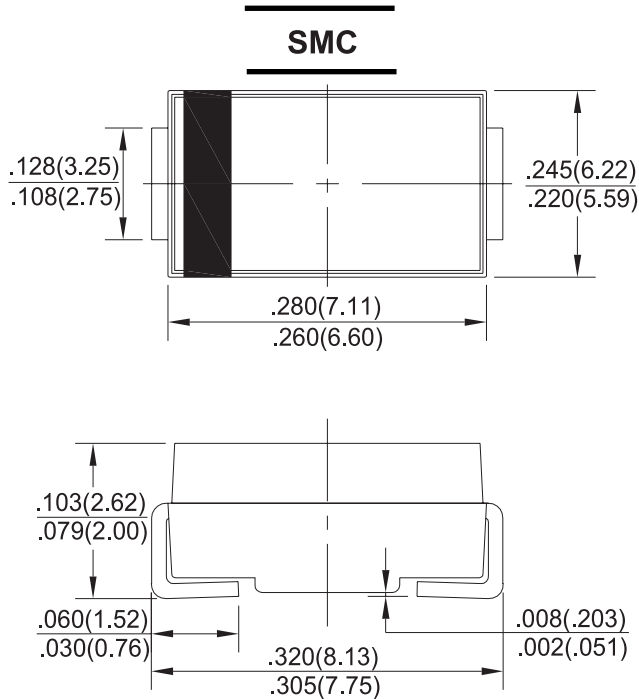
FIG. 4-TYPICAL REVERSE CHARACTERISTICS



Surface Mount Glass Passivated Rectifier



Dimensions:



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Surface Mount Glass Passivated Rectifiers	S3A+
	S3B+
	S3D+
	S3G+
	S3J+
	S3K+
	S3M+

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