

# Surface Mount Glass Passivated Rectifier



## 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

**RoHS  
Compliant**

## 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%.

Type Number	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 Rated DC Blocking Voltage at $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$I_R$	5 250							$\mu\text{A}$
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

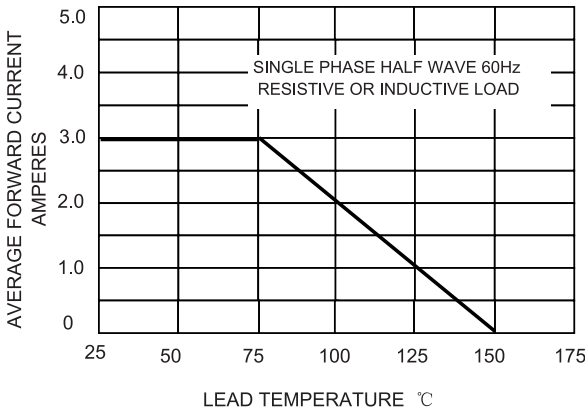


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

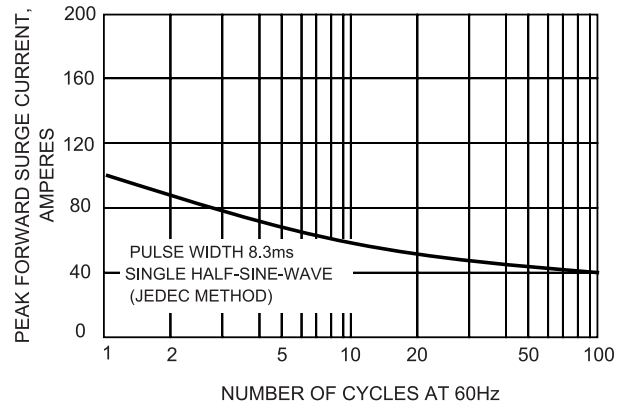


FIG.3-TYPICAL FORWARD CHARACTERISTICS

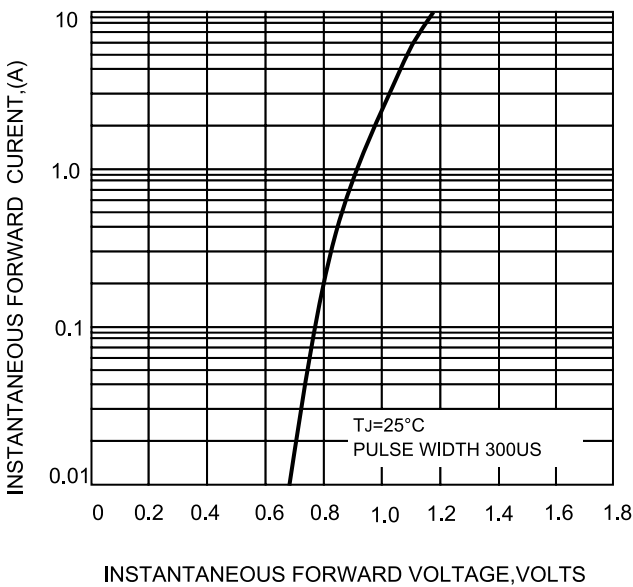
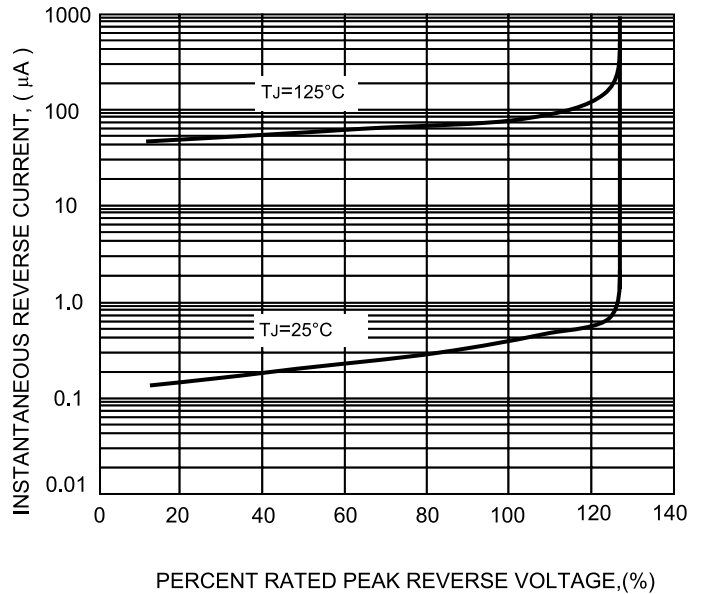


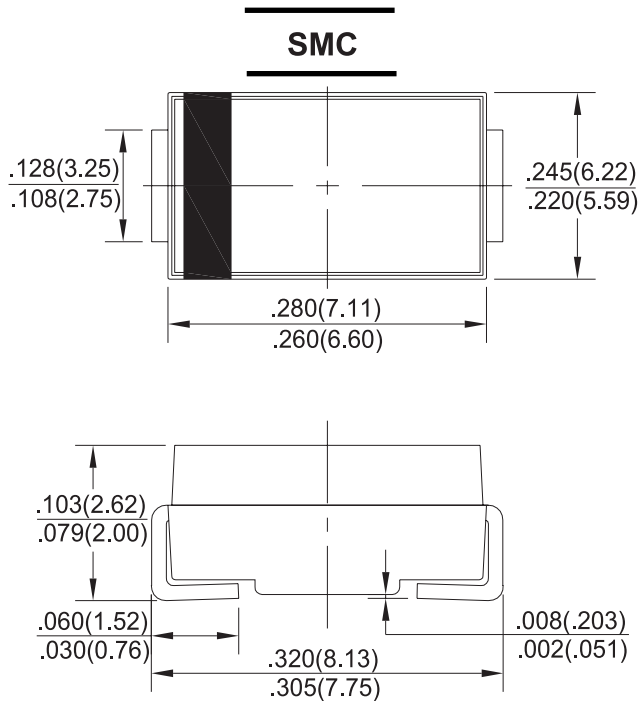
FIG.4-TYPICAL REVERSE CHARACTERISTICS



# 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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