

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

Mechanical Data:

Case	: Molded Plastic
Polarity	: Colour band denotes cathode
Weight	: 0.007 ounces, 0.21 grams
Mounting Position	: Any
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	S3DB+	S3GB+	S3MB+	Unit
Max. Recurrent Peak Reverse Voltage	V _{RRM}	200	400	1000	V
Max. RMS Voltage	V _{RMS}	140	280	700	
Max. DC Blocking Voltage	V _{DC}	200	400	1000	
Max. Average Forward Rectified Current T _L = 75°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°C T _J = 125°C	I _R	5 250			µA
Typical Junction Capacitance (Note 1)	C _J	40			pF
Typical Thermal Resistance (Note 2)	R _{θJL}	10			°C/W
Typical Thermal Resistance (Note 3)	R _{θJA}	50			°C/W
Operating Temperature Range	T _J	-55 to +150			°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

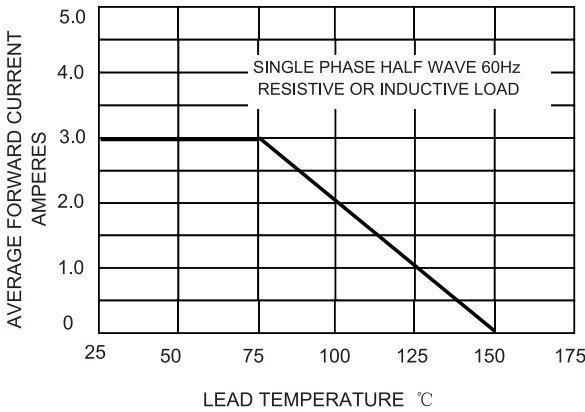


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

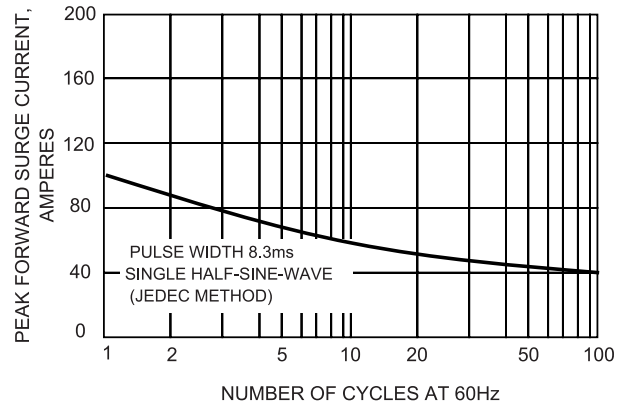


FIG. 3-TYPICAL FORWARD CHARACTERISTICS

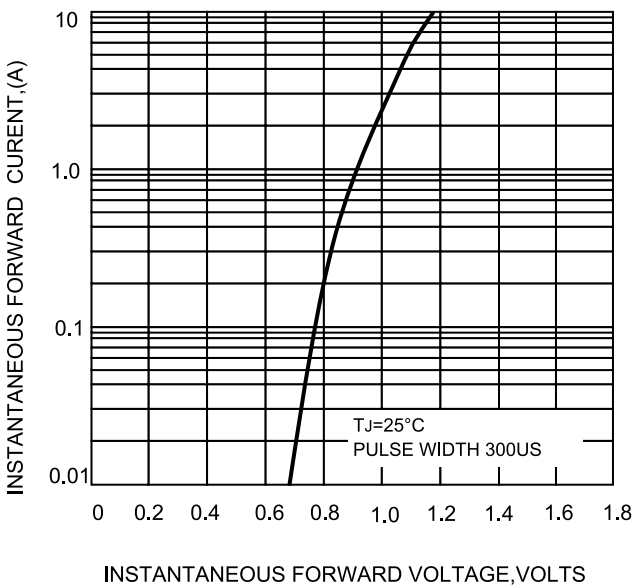
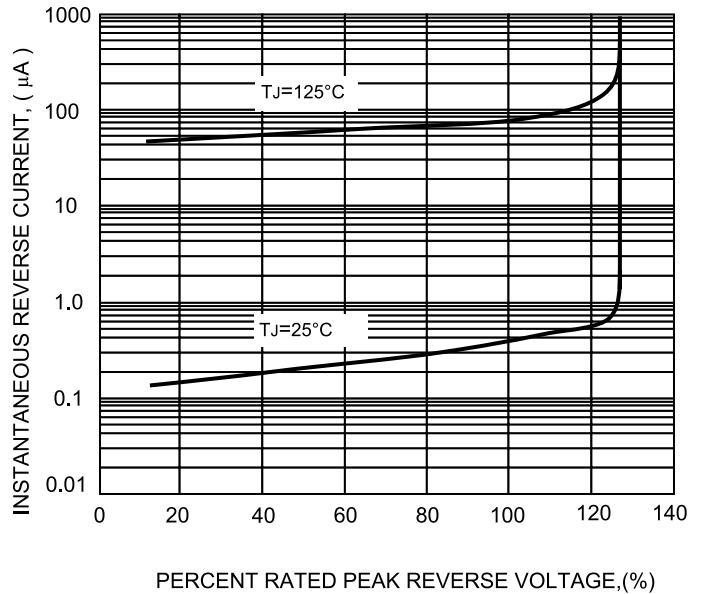


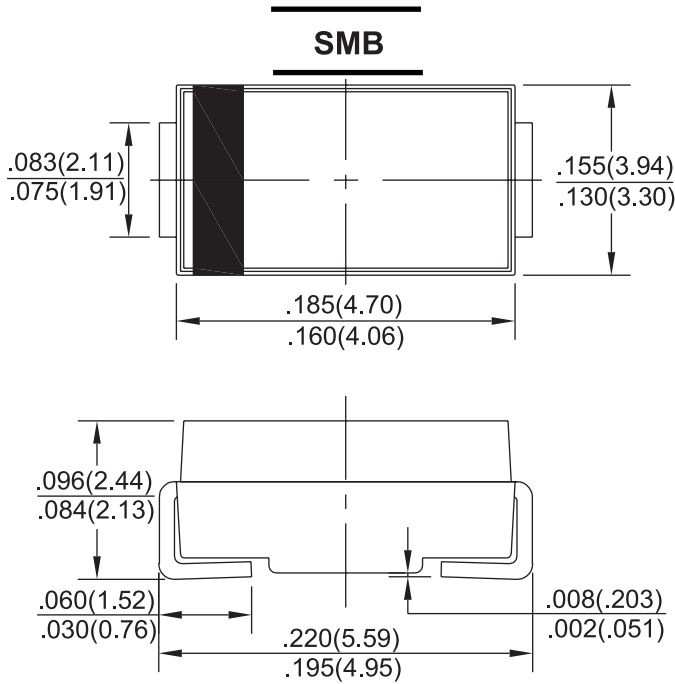
FIG. 4-TYPICAL REVERSE CHARACTERISTICS



Surface Mount Glass Passivated Rectifier



Dimensions:



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Diode Rectifier, 3A, 200V SMB	S3DB+
Diode Rectifier, 3A, 400V SMB	S3GB+
Diode Rectifier, 3A, 1000V SMB	S3MB+

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