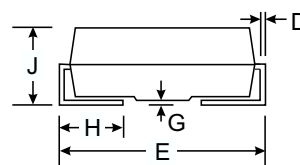
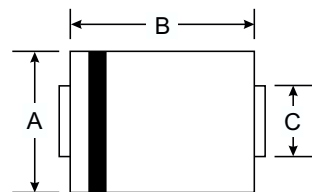


**3.0A SURFACE MOUNT GLASS PASSIVATED RECTIFIER****Features**

Glass Passivated Die Construction  
 Ideally Suited for Automatic Assembly  
 Low Forward Voltage Drop  
 Surge Overload Rating to 100A Peak  
 Low Power Loss  
 Built-in Strain Relief  
 Plastic Case Material has UL Flammability  
 Classification Rating 94V-O

**Mechanical Data**

Case: Molded Plastic  
 Terminals: Solder Plated, Solderable  
 per MIL-STD-750, Method 2026  
 Polarity: Cathode Band or Cathode Notch  
 Marking: Type Number  
 Weight: SMB Weight: 0.093 grams (approx.)



MARKING:S3MB

**Maximum Ratings and Electrical Characteristics** @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	S3MB	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	1000	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>R</sub>		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	700	V
Average Rectified Output Current @T <sub>L</sub> = 75°C	I <sub>O</sub>	3.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	100	A
Forward Voltage @I <sub>F</sub> = 3.0A	V <sub>FM</sub>	1.20	V
Peak Reverse Current @T <sub>A</sub> = 25°C	I <sub>RM</sub>	5.0	μA
At Rated DC Blocking Voltage @T <sub>A</sub> = 125°C		250	
Reverse Recovery Time (Note 1)	t <sub>rr</sub>	2.5	μS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	60	pF
Typical Thermal Resistance (Note 3)	R <sub>θJL</sub>	13	K/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +150	°C

Note: 1. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = 0.25A,  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.  
 3. Mounted on P.C. Board with 8.0mm<sup>2</sup> land area.

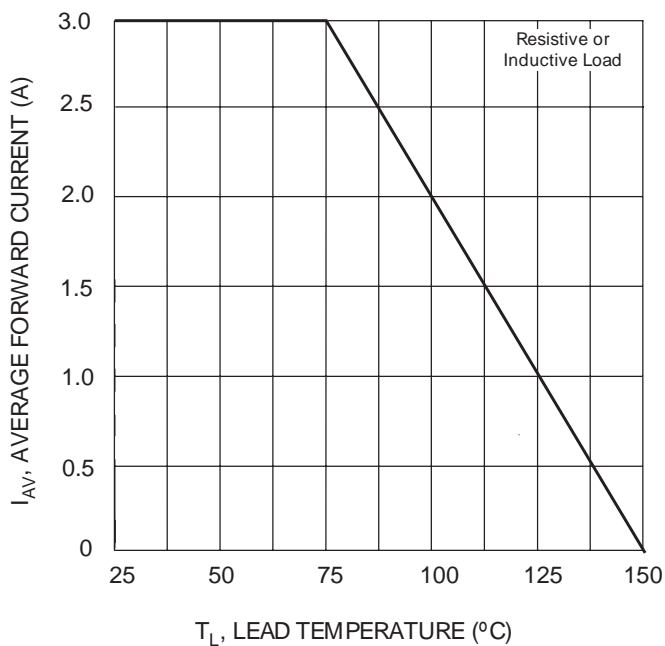


Fig. 1 Forward Current Derating Curve

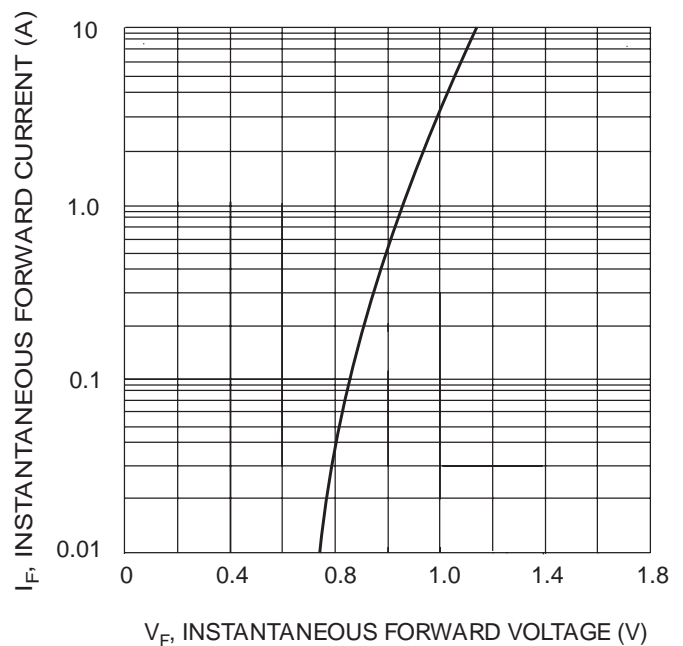


Fig. 2 Typical Forward Characteristics

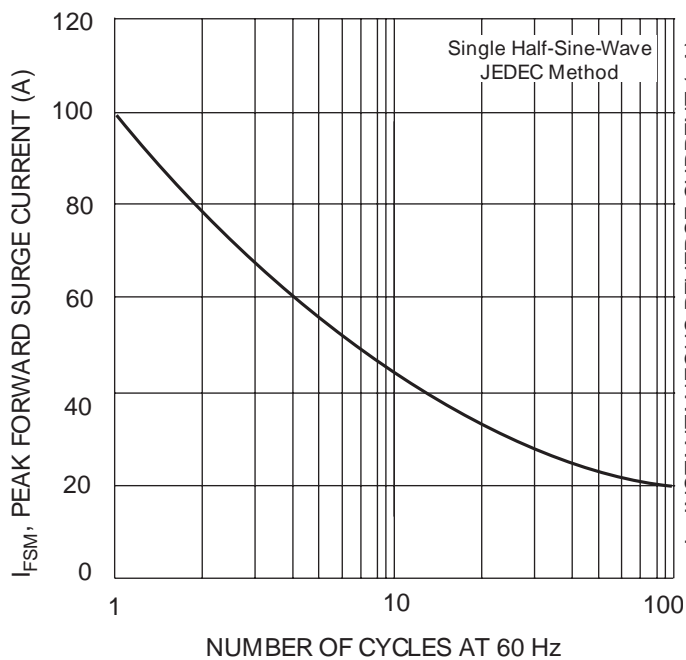


Fig. 3 Forward Surge Current Derating Curve

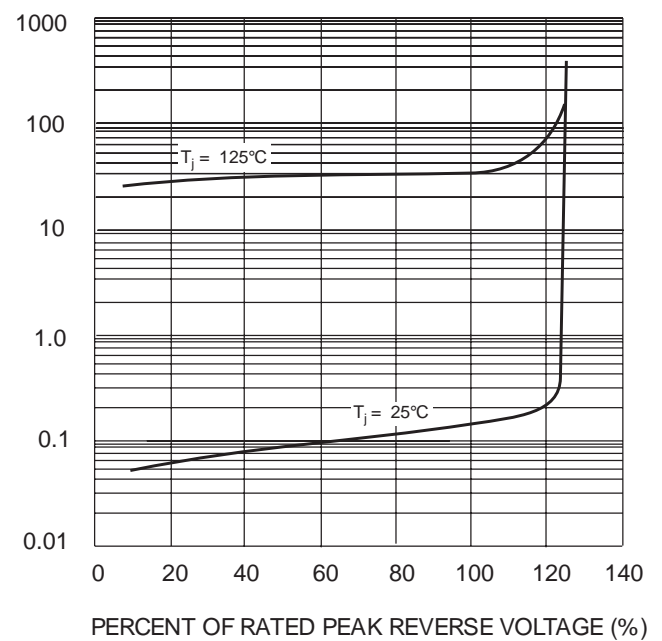


Fig. 4 Typical Reverse Characteristics