

S3A/B - S3M/B

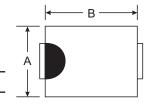
3.0A SURFACE MOUNT GLASS PASSIVATED RECTIFIER

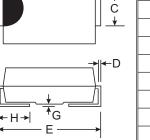
Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop and High Current Capability
- Surge Overload Rating to 100A Peak
- Ideally Suited for Automatic Assembly
- Lead Free Finish/RoHS Compliant (Note 3)

Mechanical Data

- Case: SMB/SMC
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Lead Free Plating (Matte Tin Finish). Solderable per MIL-STD-202, Method 208 (3)
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number & Date Code, See Page 2
- Ordering Information: See Page 2
- Weight: SMB 0.093 grams (approximate) SMC 0.21 grams (approximate)





Dim	SI	/IB	SMC		
	Min	Max	Min	Мах	
Α	3.30	3.94	5.59	6.22	
В	4.06	4.57	6.60	7.11	
С	1.96	2.21	2.75	3.18	
D	0.15	0.31	0.15	0.31	
Е	5.00	5.59	7.75	8.13	
G	0.10	0.20	0.10	0.20	
Н	0.76	1.52	0.76	1.52	
J	2.00	2.62	2.00	2.62	
All Dimensions in mm					



Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic		Symbol	S3 A/AB	S3 B/BB	S3 D/DB	S3 G/GB	S3 J/JB	S3 K/KB	S3 M/MB	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage		V _{R(RMS)}	30	70	140	280	420	560	700	V
Average Rectified Output Current	@ T _T = 75°C	Ιο	3.0					А		
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load		I _{FSM}	100					А		
Forward Voltage	@ I _F = 3.0A	V _{FM}	1.15					V		
Peak Reverse Current at Rated DC Blocking Voltage	@ T _A = 25°C @ T _A = 125 °C	I _{RM}	10 250			μA				
Typical Total Capacitance (Note 1)		CT	40					pF		
Typical Thermal Resistance Junction to Terminal (Note 2)		R _{θJT}	10					°C/W		
Operating and Storage Temperature Range		Tj, TSTG	G -65 to +150						°C	

Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance: Junction to Terminal, unit mounted on PC board with 5.0 mm² (0.013 mm thick) copper pad as heat sink.

3. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.

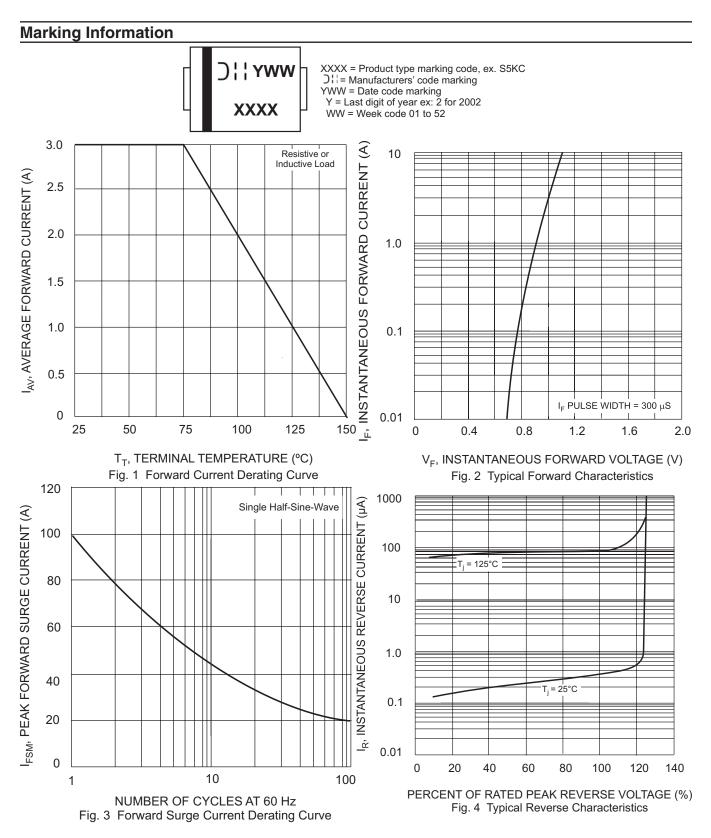


Ordering Information (Note 4)

De	evice*	Packaging	Shipping	
	B-13-F x-13-F	SMB SMC	3000/Tape & Reel	

*x = Device type, e.g. S3AB-13-F (SMB package); S3A-13-F (SMC Package).

Notes: 4. For Packaging Details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.





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