

S1A - S1M

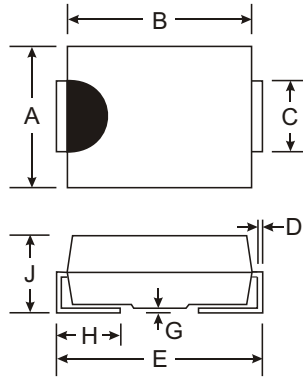
1.0A SURFACE MOUNT GLASS PASSIVATED RECTIFIER

Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop and High Current Capability
- Surge Overload Rating to 30A Peak
- Ideally Suited for Automated Assembly

Mechanical Data

- Case: Molded Plastic
- Case Material - UL Flammability Rating Classification 94V-0
- Moisture sensitivity: Level 1 per J-STD-020A
- Terminals: Solder Plated Terminal - Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band or Cathode Notch
- SMA Weight: 0.064 grams (approx.)
- SMB Weight: 0.093 grams (approx.)
- Marking: Type Number, See Page 2
- Ordering Information: See Page 2



Dim	SMA		SMB	
	Min	Max	Min	Max
A	2.29	2.92	3.30	3.94
B	4.00	4.60	4.06	4.57
C	1.27	1.63	1.96	2.21
D	0.15	0.31	0.15	0.31
E	4.80	5.59	5.00	5.59
G	0.10	0.20	0.10	0.20
H	0.76	1.52	0.76	1.52
J	2.01	2.62	2.00	2.62
All Dimensions in mm				

A, B, D, G, J, K, M Suffix Designates SMA Package
 AB, BB, DB, GB, JB, KB, MB Suffix Designates SMB Package

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	S1 A/AB	S1 B/BB	S1 D/DB	S1 G/GB	S1 J/JB	S1 K/KB	S1 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	$V_{R(RMS)}$	35	70	140	280	420	560	700	V	
Average Rectified Output Current @ T _T = 100°C	I_O	1.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30								A
Forward Voltage @ I _F = 1.0A	V_{FM}	1.1								V
Peak Reverse Leakage Current at Rated DC Blocking Voltage @ T _A = 25°C @ T _A = 125°C	I_{RM}	5.0 100								μA
Typical Total Capacitance (Note 1)	C_T	10								pF
Typical Thermal Resistance, Junction to Terminal (Note 2)	$R_{θJT}$	30								°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150								°C

- Notes: 1. Measured at 1.0MHz 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 pads as heat sink.

Ordering Information (Note 3)

Device*	Packaging	Shipping
S1x-7 S1xB-7	SMA SMB	5000/Tape & Reel 3000/Tape & Reel

