






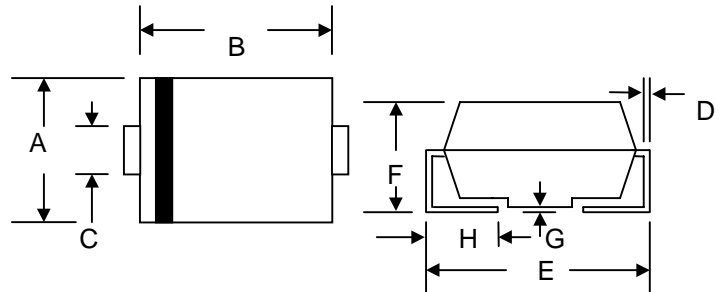


S1A – S1M






1.0A SURFACE MOUNT GLASS PASSIVATED RECTIFIER

Features

-  Glass Passivated Die Construction
-  Ideally Suited for Automatic Assembly
-  Low Forward Voltage Drop
-  Surge Overload Rating to 30A Peak
-  Low Power Loss
-  Built-in Strain Relief
-  Plastic Case Material has UL Flammability Classification Rating 94V-O



Mechanical Data

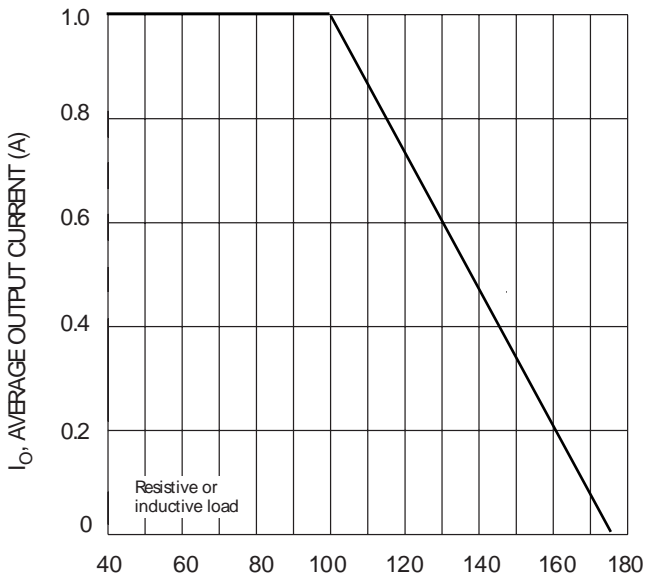
-  Case: Molded Plastic
-  Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
-  Polarity: Cathode Band or Cathode Notch
-  Marking: Type Number
-  Weight: 0.093 grams (approx.)

SMB/DO-214AA		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.70
C	1.91	2.11
D	0.152	0.305
E	5.08	5.59
F	2.13	2.44
G	0.051	0.203
H	0.76	1.27
All Dimensions in mm		

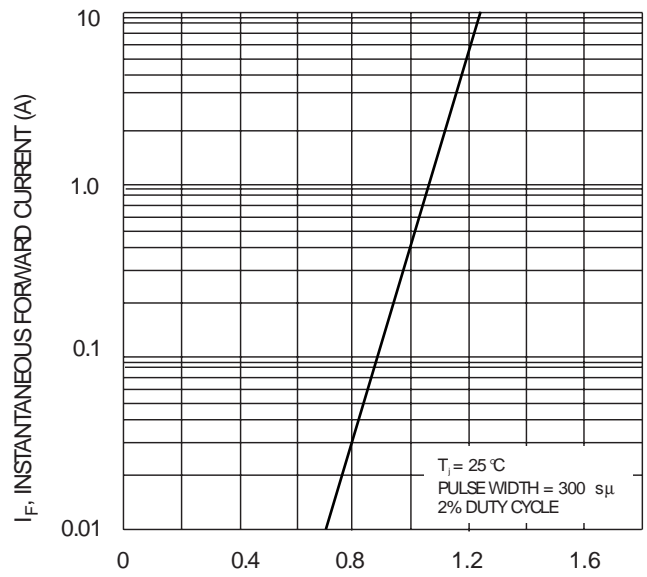
Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	S1A	S1B	S1D	S1G	S1J	S1K	S1M	Unit
Peak Repetitive Reverse Voltage	V_{RRM}								
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_L = 100^\circ\text{C}$	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 @ $I_F = 1.0\text{A}$	V_{FM}	1.10							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I_{RM}	5.0 200							μA
Reverse Recovery Time (Note 1)	t_{rr}	2.5							μS
Typical Junction Capacitance (Note 2)	C_j	15							pF
Typical Thermal Resistance (Note 3)	$R_{\theta JL}$	30							K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +175							$^\circ\text{C}$

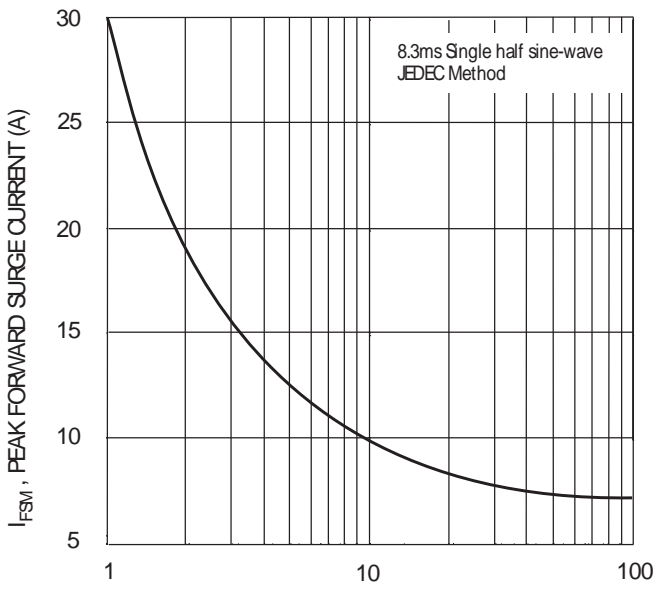
- Note: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$,
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
 3. Mounted on P.C. Board with 8.0mm² land area.



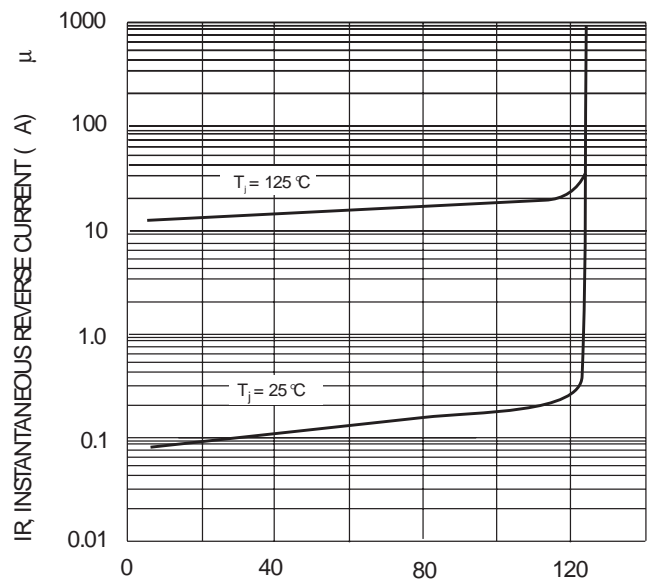
T_L , LEAD TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES @ 60Hz
Fig. 3 Max Non-Repetitive Peak Fwd Surge Current



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 4 Typical Reverse Characteristics

ORDERING INFORMATION

Product No.✍	Package Type	Shipping Quantity
S1A-T1	SMB	500/Tape & Reel
S1A-T3	SMB	3000/Tape & Reel
S1B-T1	SMB	500/Tape & Reel
S1B-T3	SMB	3000/Tape & Reel
S1D-T1	SMB	500/Tape & Reel
S1D-T3	SMB	3000/Tape & Reel
S1G-T1	SMB	500/Tape & Reel
S1G-T3	SMB	3000/Tape & Reel
S1J-T1	SMB	500/Tape & Reel
S1J-T3	SMB	3000/Tape & Reel
S1K-T1	SMB	500/Tape & Reel
S1K-T3	SMB	3000/Tape & Reel
S1M-T1	SMB	500/Tape & Reel
S1M-T3	SMB	3000/Tape & Reel

Products listed in **bold** are WTE Preferred devices.

✍T1 suffix refers to a 7" reel. T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

RECOMMENDED FOOTPRINT

