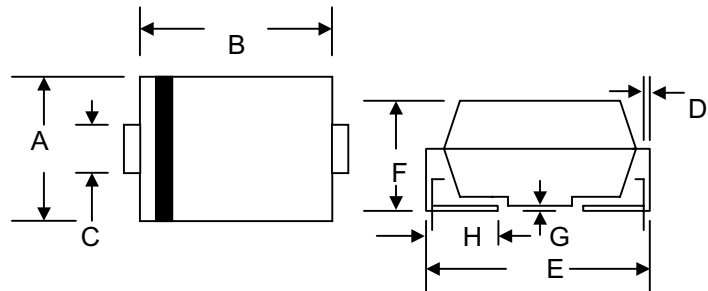


Data Sheet 2559 Rev.—

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

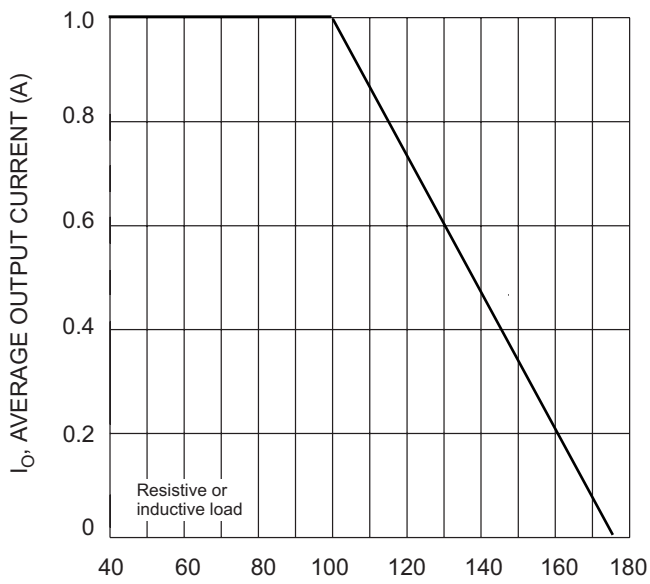
- Case: Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 grams (approx.)

SMB/DO-214AA		
Dim	Min	Max
A	0.130(3.30)	0.155(3.94)
B	0.160(4.06)	0.185(4.70)
C	0.075(1.91)	0.083(2.11)
D	0.006(0.15)	0.012(0.31)
E	0.200(5.08)	0.220(5.59)
F	0.084(2.13)	0.096(2.44)
G	0.002(0.05)	0.008(0.20)
H	0.030(0.76)	0.050(1.27)
All Dimensions in inch(mm)		

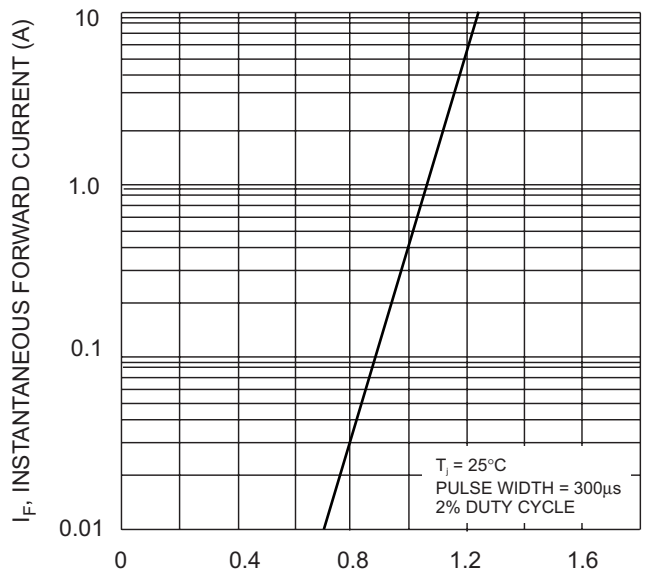
Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Characteristic	Symbol	S1AB	S1BB	S1DB	S1GB	S1JB	S1KB	S1MB	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
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							$^{\circ}\text{C}$

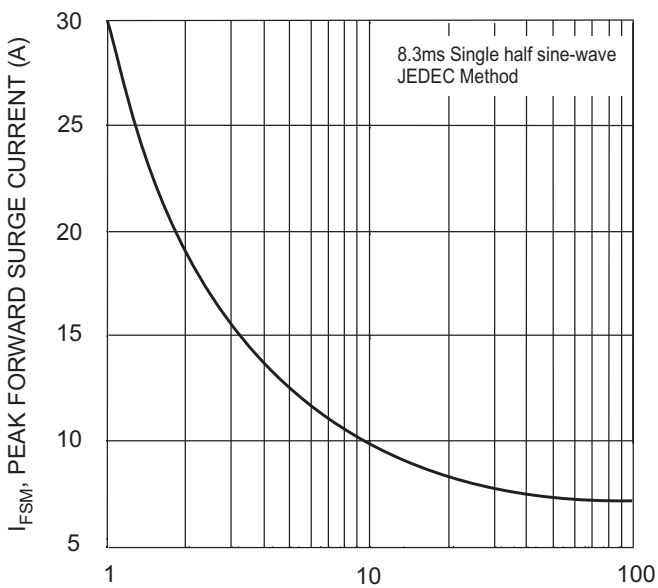
Note: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$,
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
3. Mounted on P.C. Board with 8.0mm² land area.



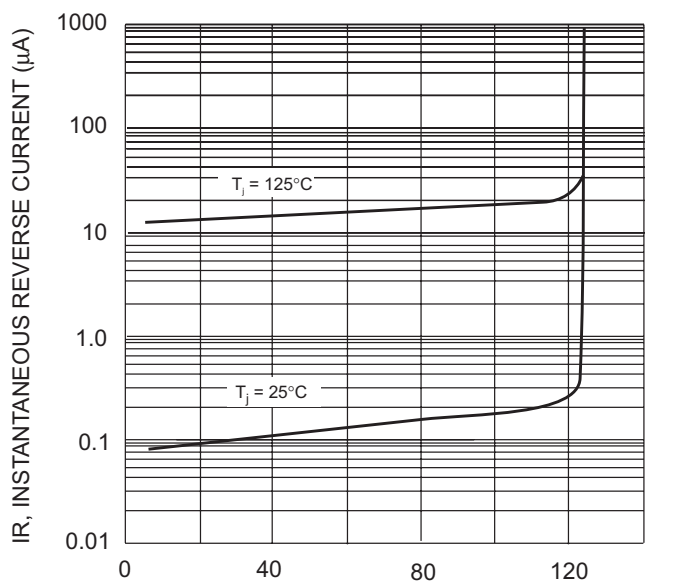
T_L , LEAD TEMPERATURE ($^{\circ}\text{C}$)
Fig. 1 Forward Current Derating Curve



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

TECHNICAL DATA

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