

Features

- High efficiency operation
- Metal silicon junction,majority carrier conduction
- Ultra low forward voltage drop,low power losses
- High forward surge current capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260°C

Reverse Voltage
 40/60/100 V
Forward Current
 3 Ampere

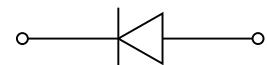
DO-214AA(SMB)

Applications

For use in low voltage high frequency inverters, free wheeling,DC/DC converters, and polarity protection applications.

Mechanical Data

- Case: DO-214AA(SMB)
 Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: Cathode line denotes the cathode end



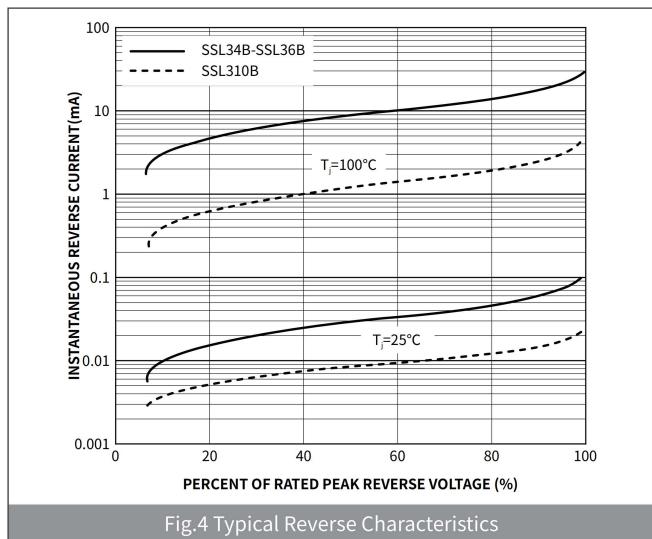
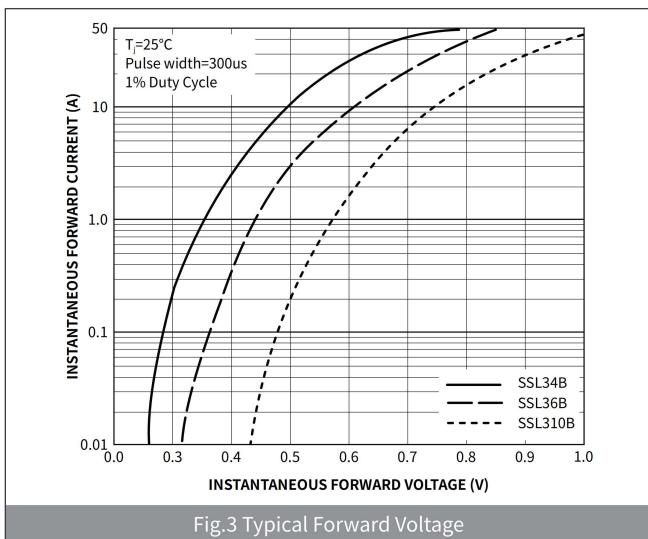
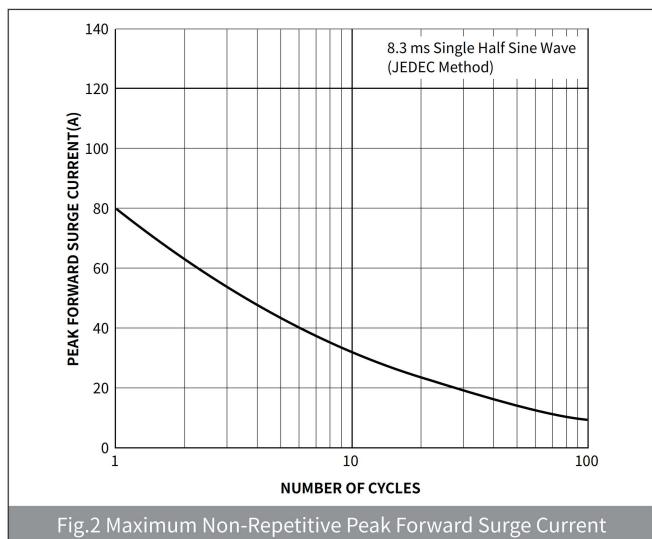
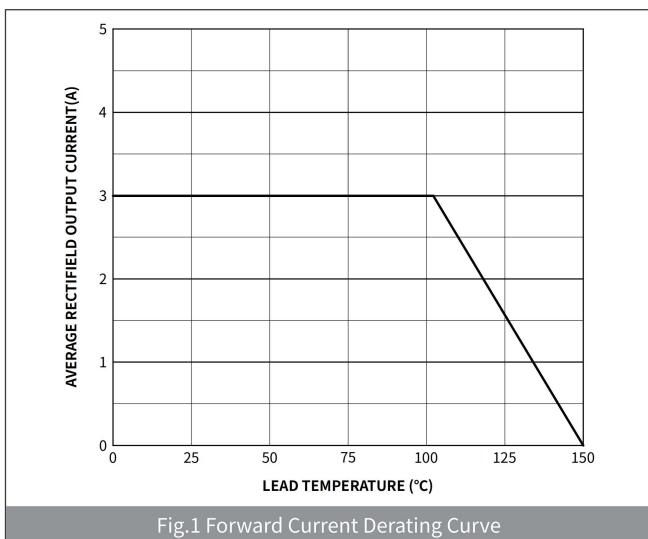
Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SSL34B	SSL36B	SSL310B
Device marking code			SSL34B	SSL36B	SSL310B
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	V	40	60	100
Maximum RMS Voltage	V _{RMS}	V	28	42	70
Maximum DC blocking Voltage	V _{DC}	V	40	60	100
Maximum Average Forward Rectified Current @60Hz sine wave, Resistance load,TL (Fig.1)	I _{F(AV)}	A		3.0	
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave	I _{FSM}	A		80	
Storage temperature	T _{stg}	°C		-55 ~ +150	
Junction temperature	T _j	°C	-55 ~ +125		-55 ~ +150
Typical Thermal Resistance	R _{θJ-A}	°C /W		85	
	R _{θJ-L}	°C /W		20	

Electrical Characteristics (Ta=25°C Unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	SSL34B	SSL36B	SSL310B
Maximum instantaneous forward voltage	$I_F=3.0A$	V_F	V	0.48	0.55	0.70
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{DC}, T_A=25^\circ C$	I_{R1}	mA	0.5		0.2
	$V_R=V_{DC}, T_A=100^\circ C$	I_{R2}		50		20
Typical junction capacitance	4.0V DC, 1MHz	C_J	pF	450	400	180

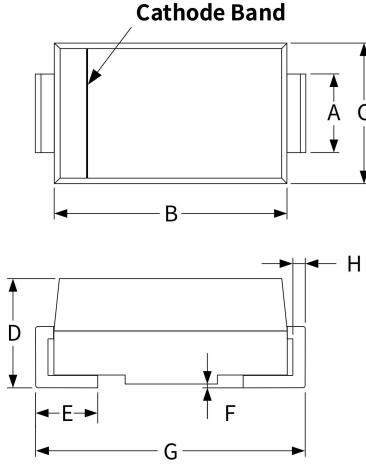
Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SMB	R3	0.098	3000	6000	48000	13"

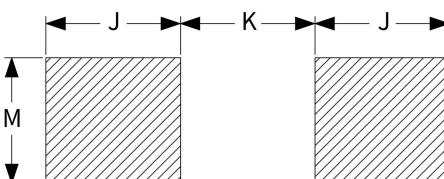
Package Outline Dimensions (SMB/DO-214AA)



The diagram illustrates the physical dimensions of the SMB package. The top view shows the overall width (B) and height (C). The cathode band is indicated by a vertical line on the left. The bottom view shows the lead spacing (G), lead thickness (E), lead height (F), and total height (D).

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.85	2.21	0.073	0.087
B	4.25	4.85	0.167	0.191
C	3.30	3.94	0.130	0.155
D	2.15	2.65	0.085	0.104
E	0.75	1.52	0.030	0.060
F	-	0.203	-	0.008
G	5.08	5.59	0.200	0.220
H	0.15	0.31	0.006	0.012

Suggested Pad Layout



The diagram shows a suggested pad layout for surface mounting. Two pads are shown, each with a hatched area. Dimension M is the height of the pad, and dimension J is the distance between the centers of the two pads. Dimension K is the distance from the center of the left pad to its outer edge.

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
M	2.26	-	0.089	-
J	2.10	-	0.085	-
K	-	2.74	-	0.107

Rev 1 : Nov. 2024

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