

OM SENI

SOD-323 Surface Mount Schottky Barrier Rectifier

Features

- V_R 40V/30V/20V
- $I_{F(AV)}$ 0.35A
- For use in low voltage,high frequency inverters
- Free wheeling,and polanty protection applications

SD103AWS THRU SD103CWS

Reverse Voltage

40/30/20 V

Forward Current

0.35 Ampere

Applications

For use in low voltage high frequency circuit signals.

Mechanical Data

- Case: SOD-323
- 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



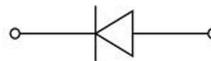
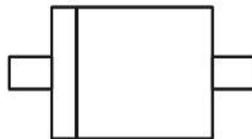
Function Diagram

Marking:

SD103AWS:S4

SD103BWS:S5

SD103CWS:S6



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

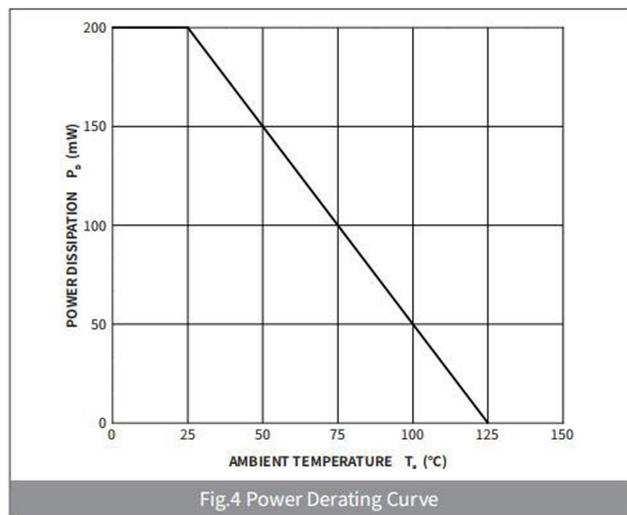
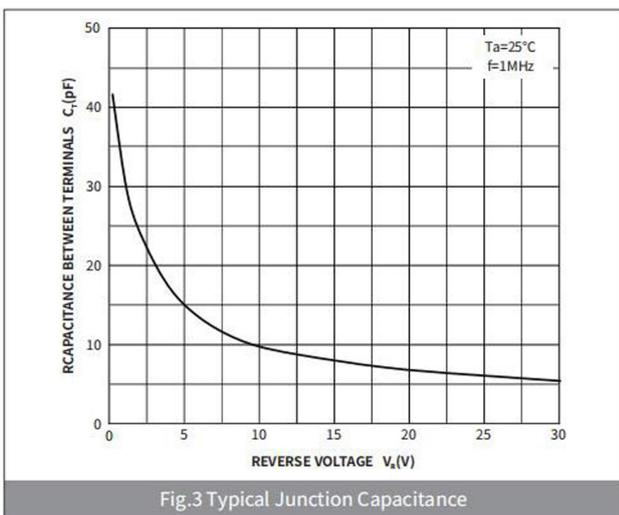
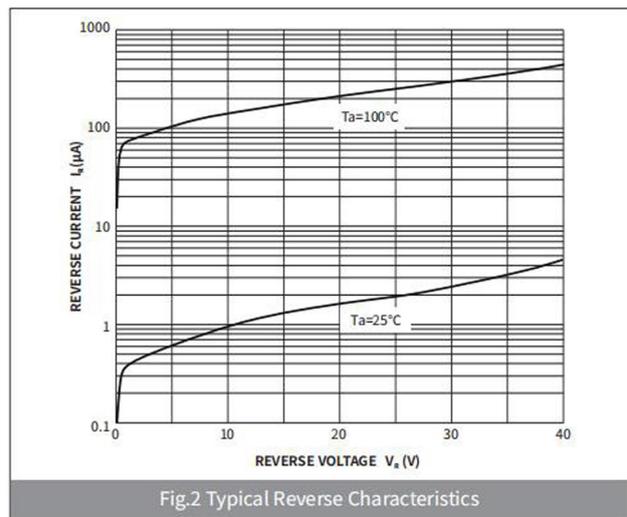
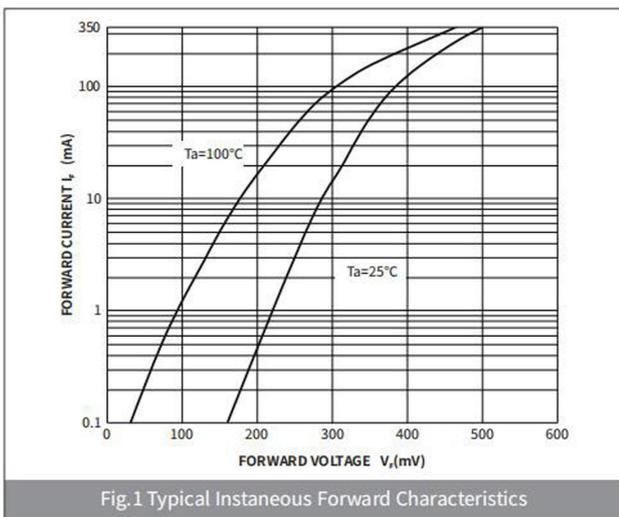
PARAMETER	SYMBOL	UNIT	SD103AWS	SD103BWS	SD103CWS
Maximum repetitive peak reverse voltage	V_{RRM}	V	40	30	20
Maximum RMS Voltage	V_{RMS}	V	28	21	14
Maximum DC blocking voltage	V_{DC}	V	40	30	20
Maximum Average Forward Rectified Current	$I_{F(AV)}$	mA	350		
Non-repetitive Peak Forward Surge Current @t=8.3ms Half-sine wave	I_{FSM}	A	1.5		
Power Dissipation	P_d	mW	200		
Storage temperature	T_{stg}	°C	-55~+125		
Junction temperature	T_j	°C	-55 ~+150		
Typical Thermal Resistance	$R_{\theta J-A}$	°C /W	500		

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

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	SD103AWS	SD103BWS	SD103CWS
Maximum instantaneous forward voltage	$I_f=20\text{mA}$	V_{F1}	V	0.37		
	$I_f=200\text{mA}$	V_{F2}		0.60		
Maximum Reverse current	SD103AWS	I_R	μA	$V_R=30\text{V}, T_A=25^\circ\text{C}$		
	SD103BWS			$V_R=20\text{V}, T_A=25^\circ\text{C}$		
	SD103CWS			$V_R=10\text{V}, T_A=25^\circ\text{C}$		
Typical junction capacitance	$V_R=0\text{V}, f=1\text{MHz}$	C_j	pF	50		

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



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Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SOD-323	R1	0.0048	3000	30000	120000	7"

Package Outline Dimensions (SOD-323)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.60	1.80	0.063	0.071
B	0.25	0.40	0.010	0.016
C	2.30	2.80	0.091	0.110
D	0.80	1.10	0.031	0.043
D ₁	0.80	0.90	0.031	0.035
E	1.20	1.40	0.047	0.055
F	0.08	0.18	0.003	0.007
L	0.475REF		0.019REF	
L ₁	0.25	0.40	0.010	0.016
H	-	0.14	-	0.006

Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
X	0.65	0.75	0.026	0.030
Y	0.65	0.75	0.026	0.030
Z	2.10	2.20	0.084	0.088