



SD103AWS THRU SD103CWS

Schottky Barrier Rectifiers

Features

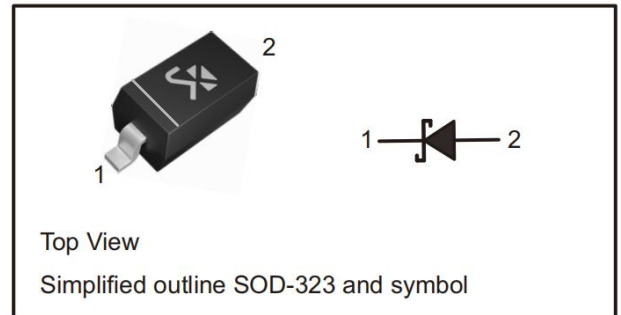
- Low forward voltage drop
- Guard ring construction for transient protection
- Negligible reverse recovery time
- Low capacitance

Marking

Type number	Marking Code
SD103AWS	S4
SD103BWS	S5
SD103CWS	S6

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Maximum Ratings And Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Parameter		Symbol	SD103AWS	SD103BWS	SD103CWS	Units
Peak Repetitive Reverse Voltage		V _{RRM}	40	30	20	V
RMS Reverse Voltage		V _{RMS}	28	21	14	V
Working Peak Reverse Voltage		V _{DC}	40	30	20	V
Peak Forward Surge Current@8.3 ms		I _{FSM}	2			A
Maximum Instantaneous Forward Voltage	I _F =20mA	V _F	0.37			V
	I _F =200mA		0.60			V
Power Dissipation		P _D	200			mW
Reverse Current	SD103AWS,V _R =25V	I _R	1	-	-	uA
	SD103BWS,V _R =20V		-	1	-	
	SD103CWS,V _R =10V		-	-	1	
Thermal Resistance Junction to Ambient		R _{θJA}	300			°C/W
Reverse Voltage I _R =100uA	SD103AWS	V _(BR)	40			V
	SD103BWS		30			
	SD103CWS		20			
Reverse Recovery time ⁽¹⁾		trr	10			ns
Forward Continuous Current		I _{FM}	350			mA
Total Capacitance V _R =0V,f=1MHz		C _{tot}	50			pF
Junction Temperature		T _J	125			°C
Storage Temperature		T _{STG}	-55~+150			°C

Note:(1)condition: $I_F=I_R=200mA, I_{tr}=0.1 \times I_R, R_L=100\Omega$



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Typical Characteristic

Fig.1 Power Derating Curve

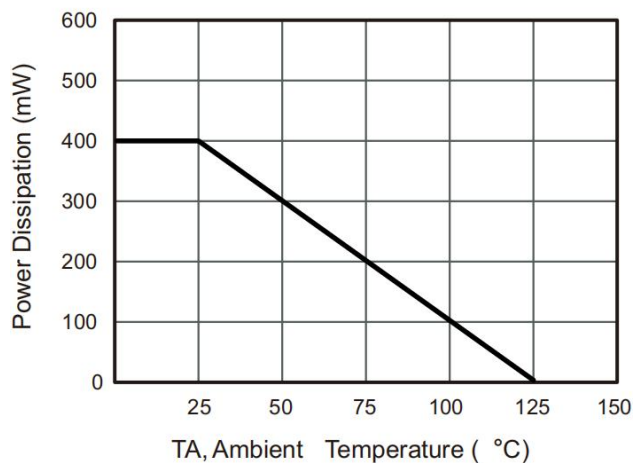


Fig.2 Typical Reverse Characteristics

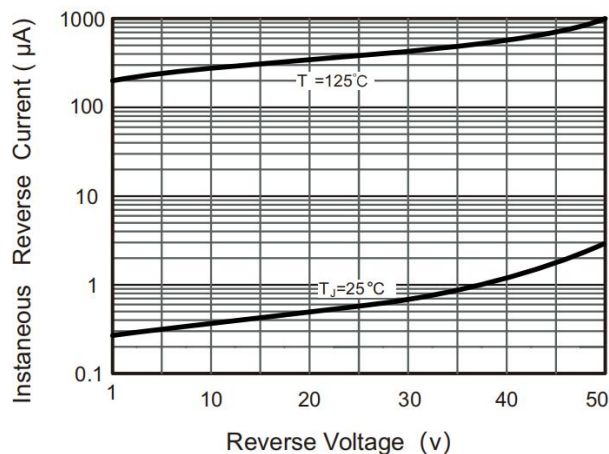


Fig.3 Forward Characteristics

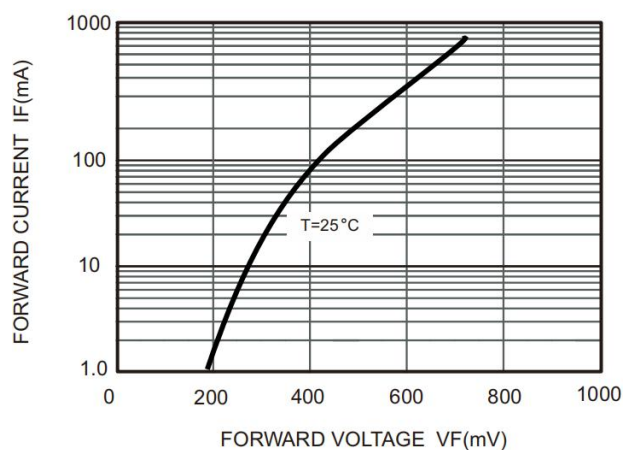


Fig.4 Typical Transient Thermal Impedance

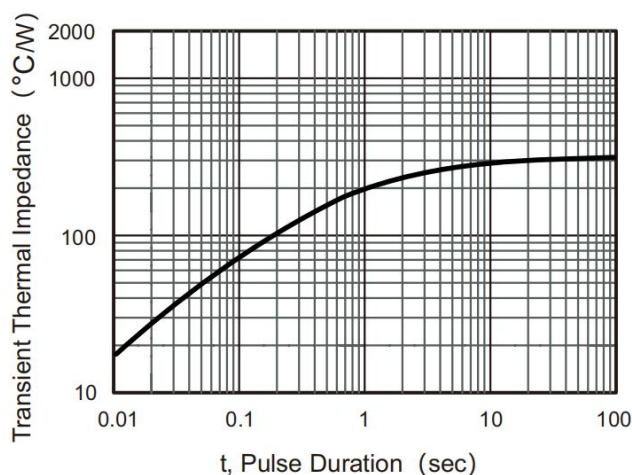
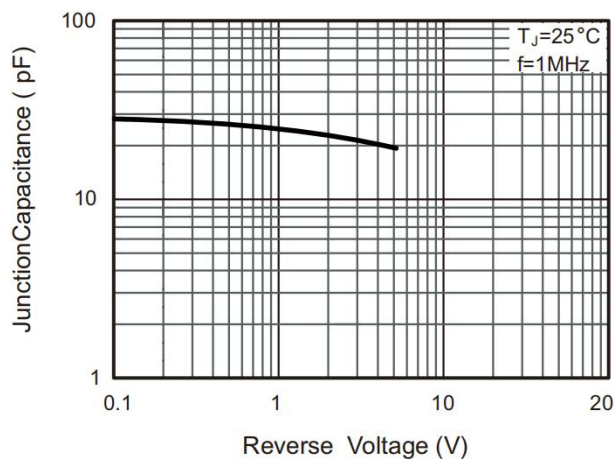


Fig.5 Typical Junction Capacitance



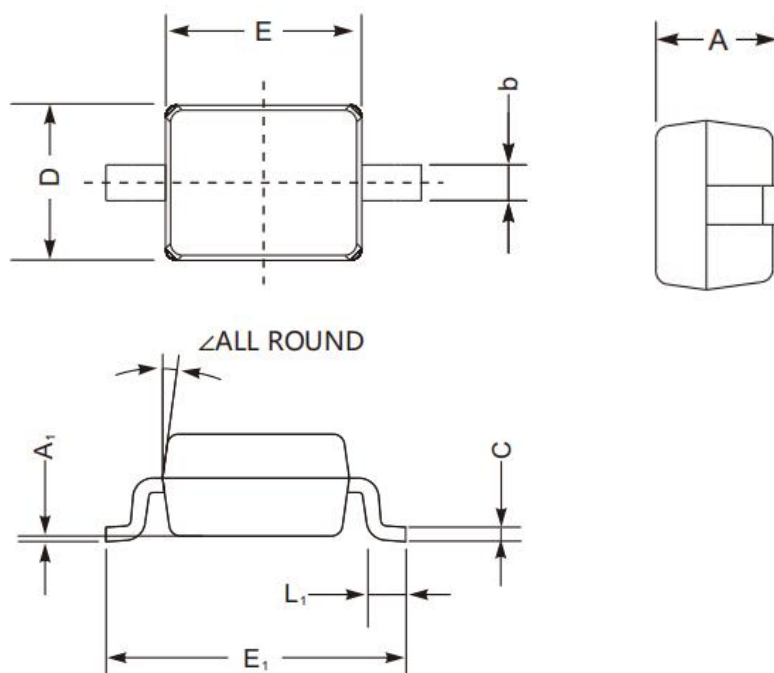


SD103AWS THRU SD103CWS

Package Information

SOD-323

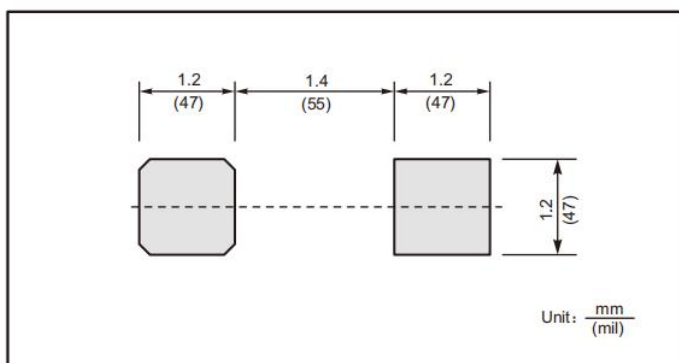
Dimensions in mm

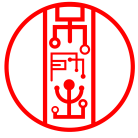


SOD-323 mechanical data

UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	55	100	9.8	7.9	—	

The recommended mounting pad size





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