

Schottky Barrier Rectifiers

Features

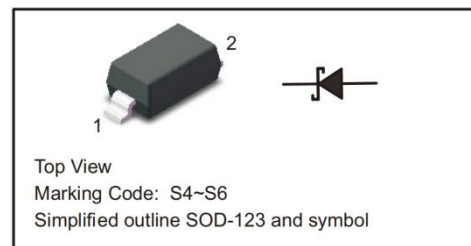
- Low forward voltage drop
- Guard ring ring construction for transient protection
- Negligible reverse recovery time
- Low capacitance

Maximum Ratings And Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Parameter		Symbol	SD103AW	SD103BW	SD103CW	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				
Power Dissipation		P _D	400			mW	
Reverse Current	SD103AW,V _R =30V		I _R	5			uA
	SD103BW,V _R =20V				5		
	SD103CW,V _R =10V					5	
Thermal Resistance Junction to Ambient		R _{θJA}	300			°C/W	
Reverse Voltage I _R =100uA	SD103AW		V _{BR}	40		V	
	SD103BW			30			
	SD103CW			20			
Reverse Recovery time I _F =I _R =200mA,I _{tr} =0.1xI _R ,R _L =100Ω		t _{rr}	10			ns	
Forward Continuous Current		I _F	350			mA	
Total Capacitance V _R =0V,f=1MHz		C _{tot}	28			pF	
Junction Temperature		T _J	125			°C	
Storage Temperature		T _{STG}	-55~+150			°C	

Typical Characteristic

Fig.1 Power Derating Curve

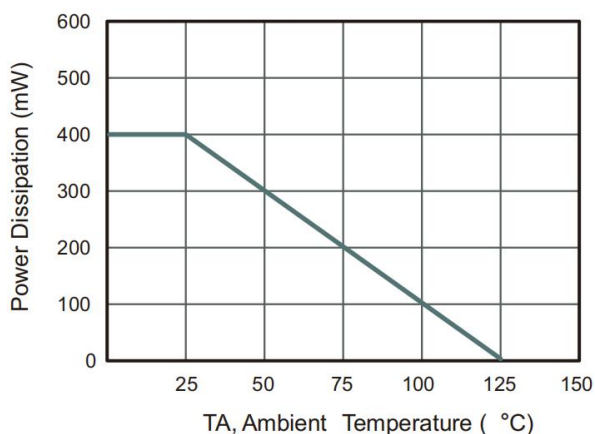


Fig.2 Typical Reverse Characteristics

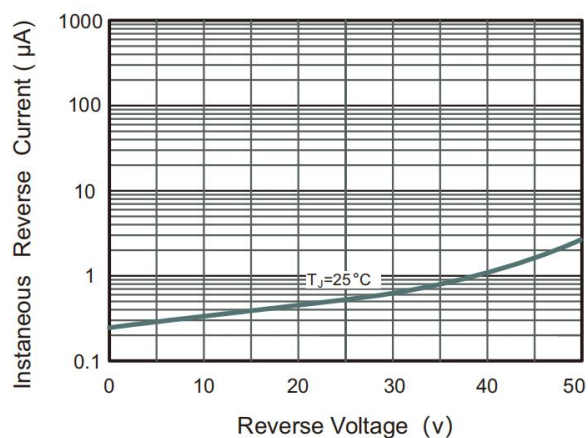


Fig.3 Forward Characteristics

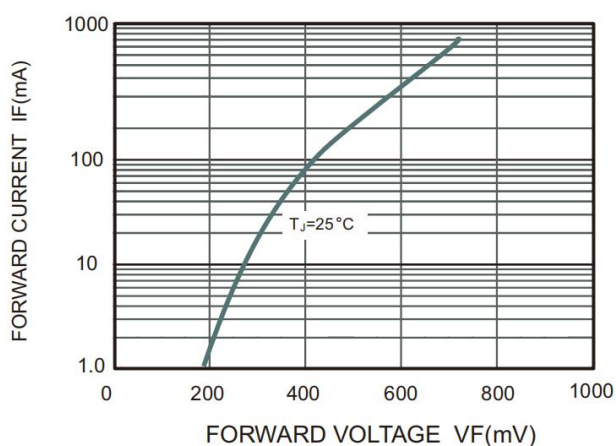


Fig.4 Typical Transient Thermal Impedance

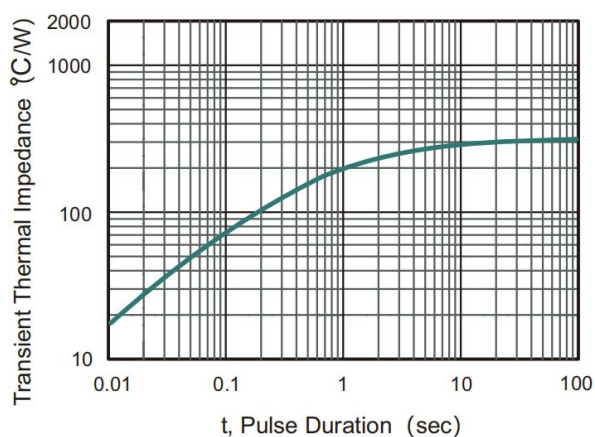
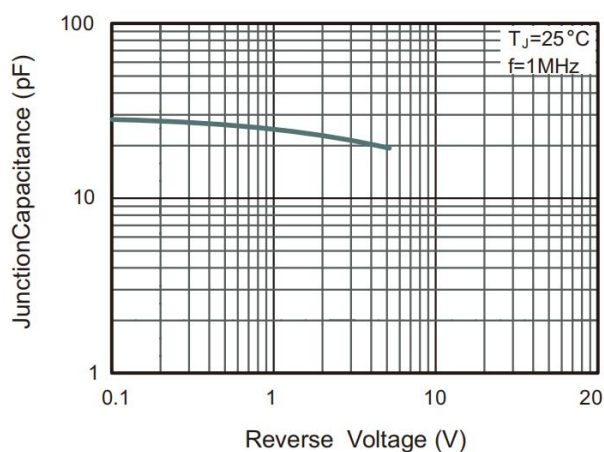


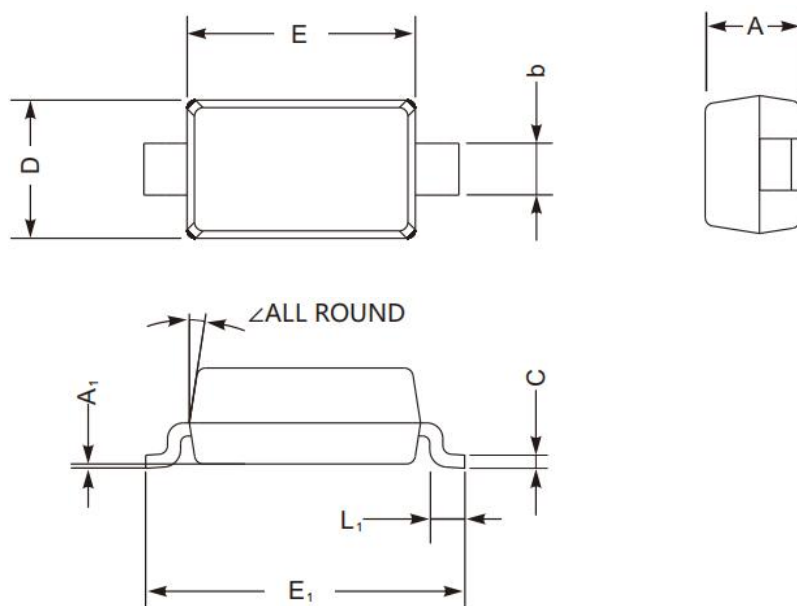
Fig.5 Typical Junction Capacitance



Package Information

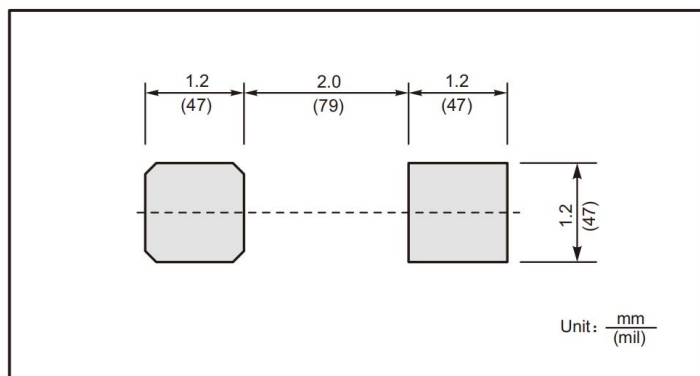
SOD-123

Dimensions in mm



Unit		A	C	D	E	E ₁	L ₁	b	A ₁	∠
mm	max	1.3	0.22	1.8	2.8	3.9	0.45	0.7	0.2	9°
	min	0.9	0.09	1.5	2.5	3.6	0.25	0.5	-	
mil	max	51	8.7	71	110	154	18	28	8	
	min	35	3.5	59	98	142	10	20	-	

The recommended mounting pad size



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