

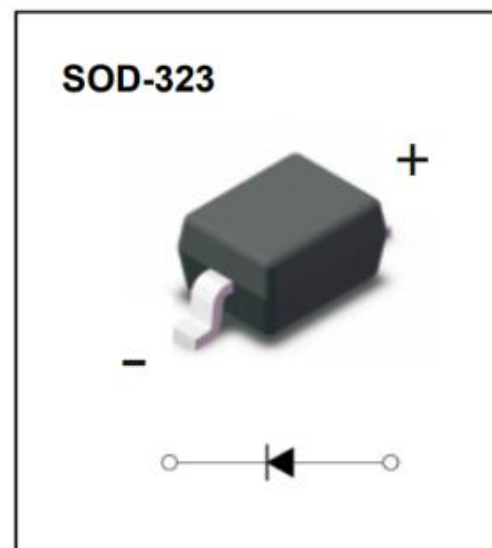
Schottky Barrier Rectifiers

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



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		uA
	SD103CWS, $V_R=10V$				1	uA
Thermal Resistance Junction to Ambient		$R_{\theta JA}$	300			°C/W
Reverse Boltage $I_R=100uA$	SD103BWS	$V_{(BR)R}$	40			V
	SD103BWS		30			V
	SD103CWS		20			V
Reverse Recovery time $I_F=I_R=200mA, I_{tr}=0.1 \times I_R, R_L=100\Omega$		t_{rr}	10			ns
Forward Continuons Current		I_{FM}	350			mA
Total Capacitance $V_R=0V, f=1MHz$		C_{tot}	50			pF
Junction Temperture		T_J	125			°C
Storage Temperature Range		T_{STG}	-55~+150			°C

Typical Characteristic

Fig.1 Power Derating Curve

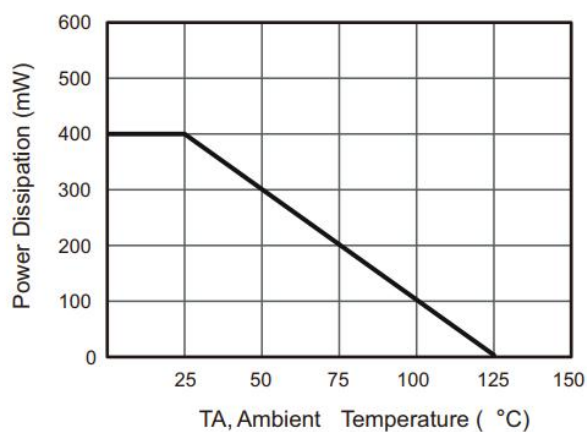


Fig.2 Typical Reverse Characteristics

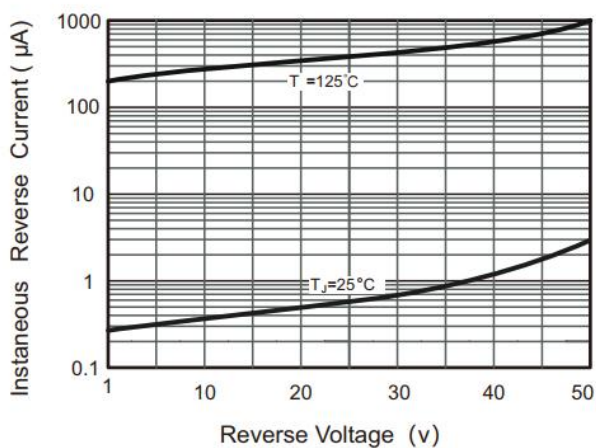


Fig.3 Forward Characteristics

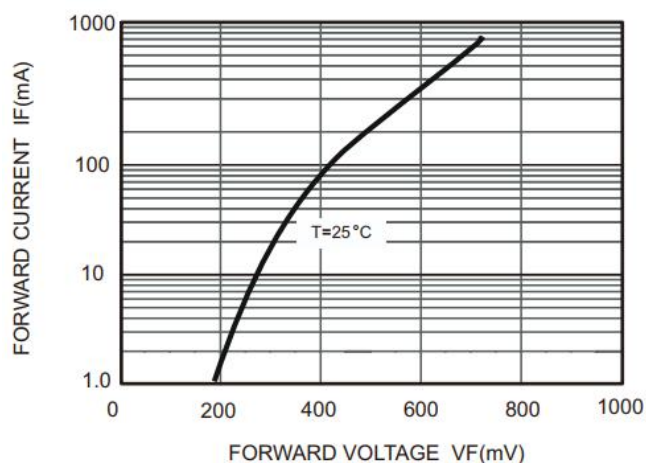


Fig.4 Typical Transient Thermal Impedance

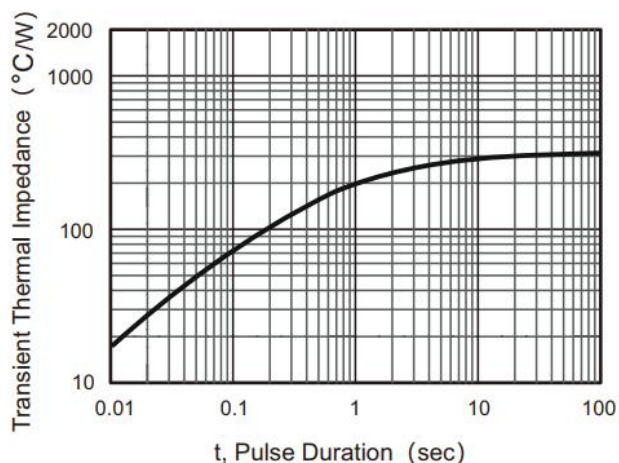
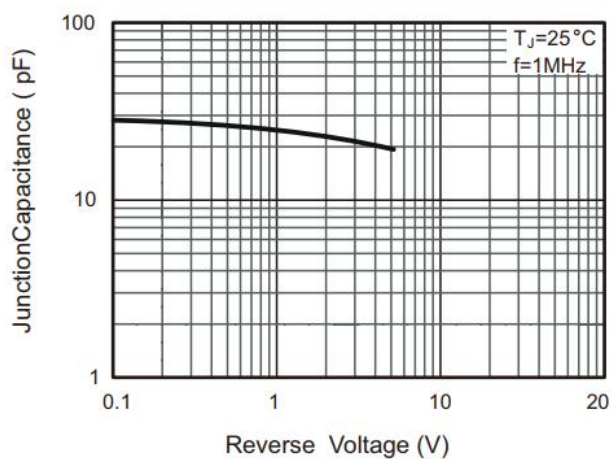


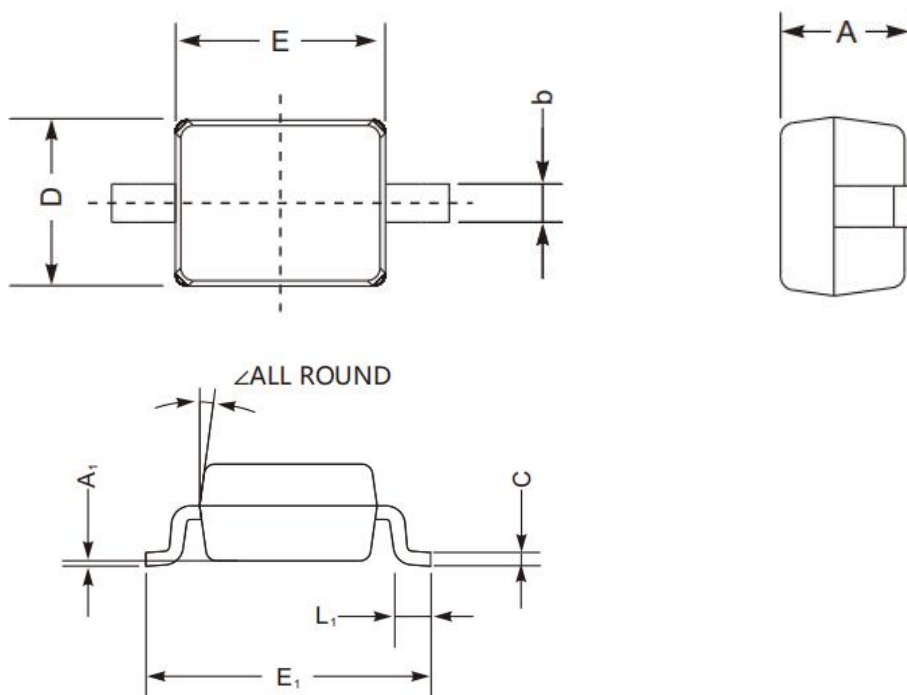
Fig.5 Typical Junction Capacitance



Package Information

SOD-323

Dimensions in mm



Unit		A	C	D	E	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

