



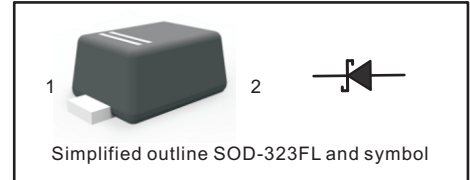
Schottky Barrier Diode

FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Capacitance

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



MECHANICAL DATA

- Case: SOD-323FL
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 4.5mg / 0.00016oz

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	SD103AWSFL	SD103BWSFL	SD103CWSFL	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, 1.0s single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	1.5			A
Maximum Instantaneous Forward Voltage $I_F=20mA$ $I_F=200mA$	V_F	0.37 0.60			V
Power Dissipation	P_D	200			mW
Reverse current SD103AWSFL, $V_R=30V$ SD103BWSFL, $V_R=20V$ SD103CWSFL, $V_R=10V$	I_R	5 — —	— 5 —	— — 5	uA
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	300			°C/W
Reverse voltage $I_R=100uA$ SD103AWSFL SD103BWSFL SD103CWSFL	$V_{(BR)R}$	40 30 20			V
Reverse recovery time $I_F=I_R=200mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$	t_{rr}	10			ns
Forward Continuons Current	I_{FM}	350			mA
Total capacitance $V_R=0V, f=1MHz$	C_{tot}	50			pF
Junction temperature	T_j	125			°C
Storage temperature	T_{stg}	-55 ~ +150			°C



Fig.1 Forward Current Derating Curve

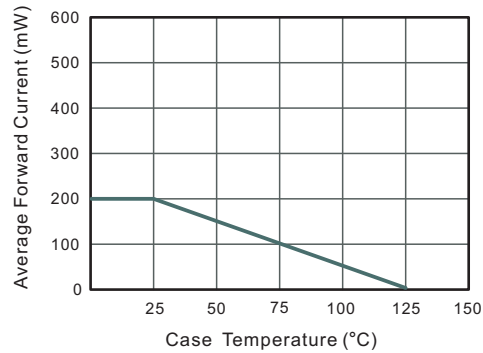


Fig.2 Typical Reverse Characteristics

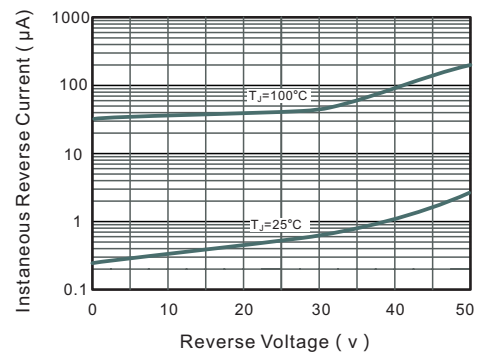


Fig.3 Forward Characteristics

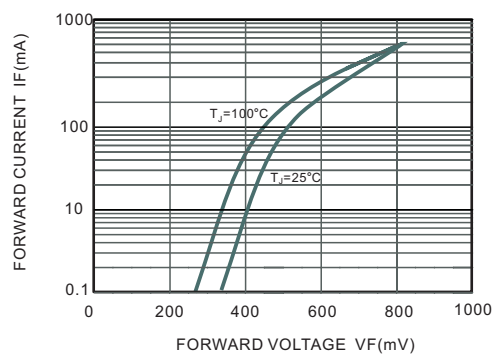


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

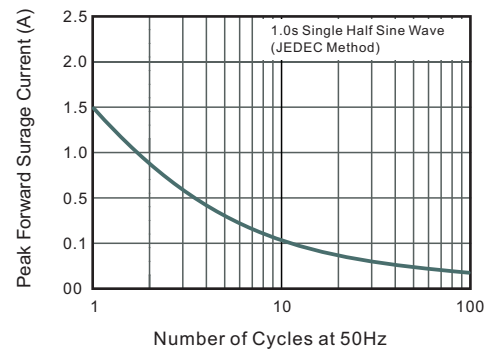
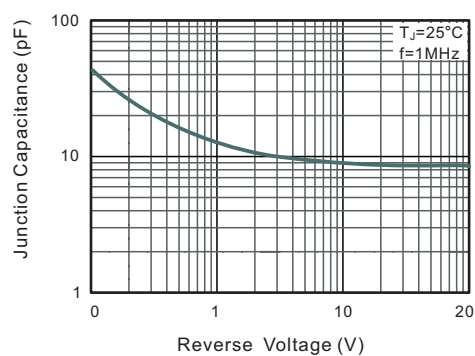


Fig.5 Typical Junction Capacitance

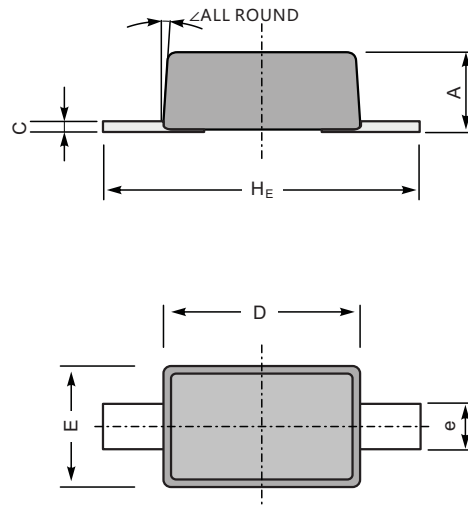




PACKAGE OUTLINE

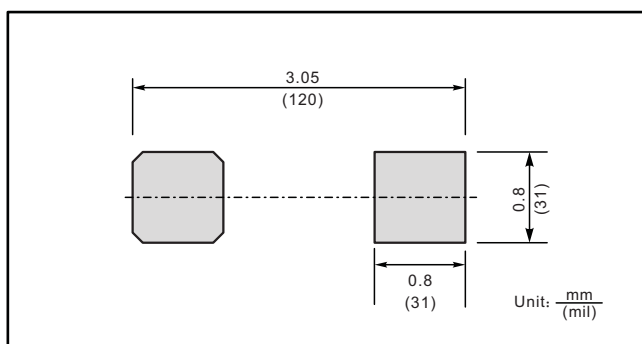
Plastic surface mounted package; 2 leads

SOD-323FL



UNIT		A	C	D	E	e	H _E	∠
mm	max	1.0	0.25	1.8	1.35	0.4	2.7	8°
	min	0.8	0.05	1.6	1.15	0.25	2.3	
mil	max	39	9.8	71	53	18	106	
	min	31	2.0	63	45	10	91	

The recommended mounting pad size



Marking

Type number	Marking code
SD103AWSFL	S4
SD103BWSFL	S5
SD103CWSFL	S6