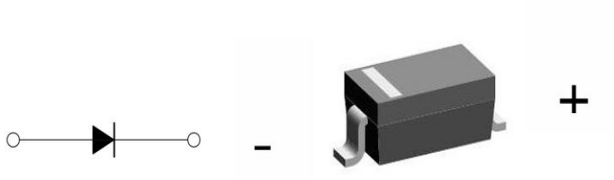
Schottky Barrier Diode

Parameter	Value	Unit
V_R	100	V
I_F	150	mA



SOD-323

Features

- High breakdown voltage
- Low turn-on voltage
- Guard ring construction for transient protection

Absolute Maximum Ratings(Ta=25℃unless otherwise noted)

Parameter	Symbol	Limit	Unit
Peak repetitive peak reverse voltage Working peak reverse voltage	V_{RRM} V_{RWM}	100	V
Forward continuous current	I_F	150	mA
Repetitive peak forward current (Note 1) @ tp<1.0s, Duty Cycle<50%	I_{FRM}	350	mA
Non.repetitive Peak Forward surge current @ t=8.3ms	I_{FSM}	750	mA
Power dissipation	P_D	200	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	500	℃/W
Operating Junction Temperature Range	T_J	-40 ~ +125	℃
Storage Temperature Range	T_{STG}	-55 ~ +150	℃

Electrical Characteristics(Ta=25℃unless otherwise noted)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage(Note 2)	V_R	I_R=100μA	100			V
Reverse voltage leakage current	I_R	V_{R1}=1.5V			0.3	μA
		V_{R2}=10V			0.5	
		V_{R3}=50V			1	
		V_{R4}=75V			2	
Forward voltage(Note 2)	V_F	I_{F1}=0.1mA			0.25	V
		I_{F2}=10mA			0.45	
		I_{F3}=250mA			1	
Diode capacitance	C_T	V_R=0, f=1MHz		20		pF
		V_R=1V, f=1MHz		12		

Notes: 1. Part mounted on FR-4 board with recommended pad layout.

2. Short duration pulse test used to minimize self-heating effect.

Typical Characteristics

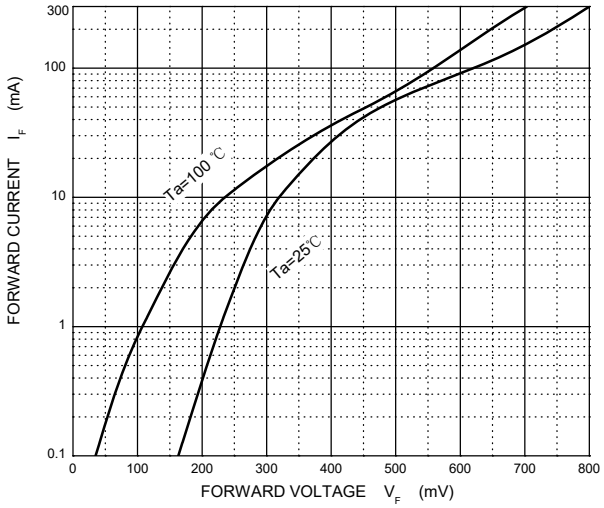


Fig.1 Forward Characteristics

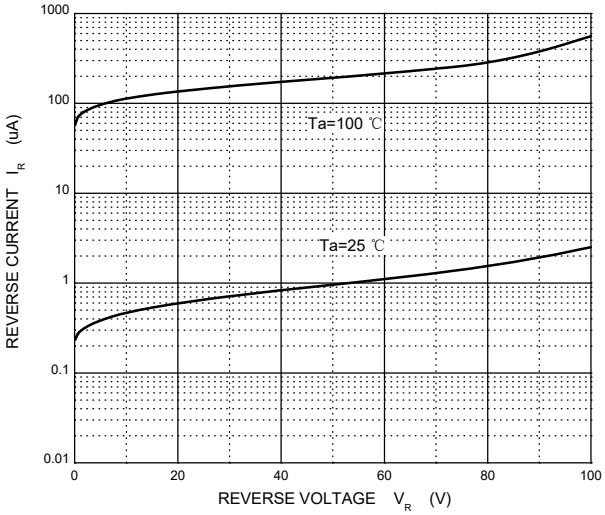


Fig.2 Reverse Characteristics

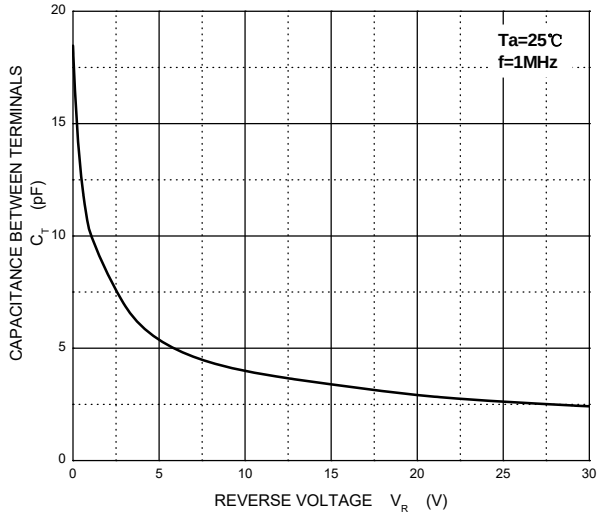


Fig.3 Capacitance Characteristics

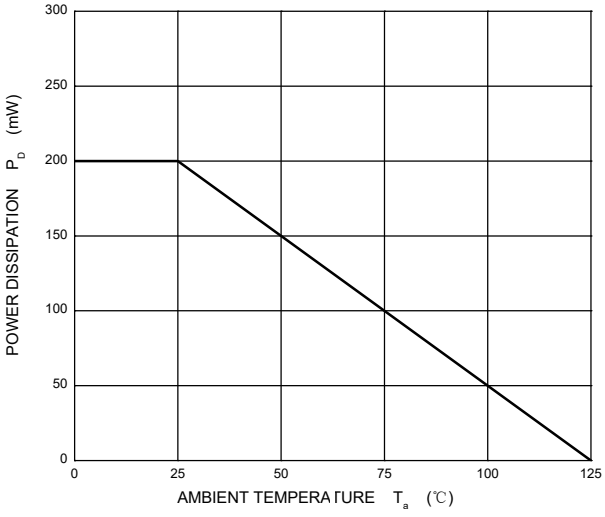
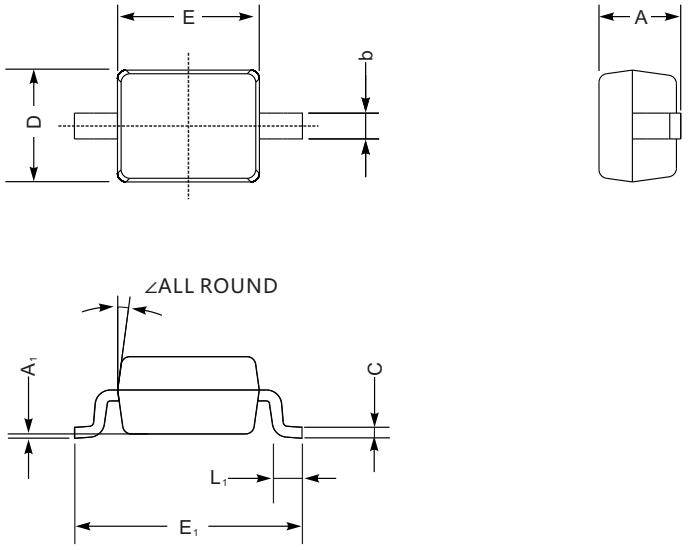


Fig.4 Power Derating Curve

Package Outlines (Units: mm)

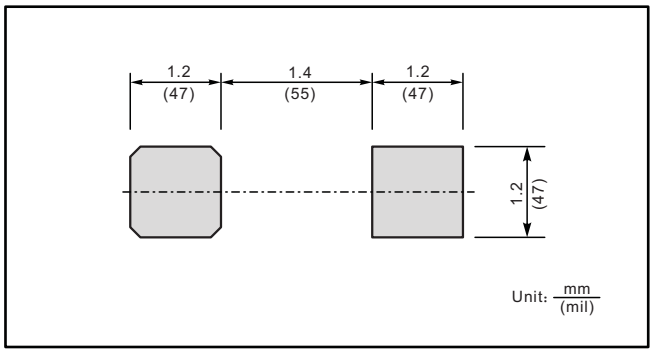
Plastic surface mounted package; 2 leads



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	63	100	9.8	7.9	—	

The recommended mounting pad size



Marking

Type number	Marking code
BAT46WS	S9

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