山东晶导微电子股份有限公司
Jingdao Microelectronics co.LTD

BAT46WS
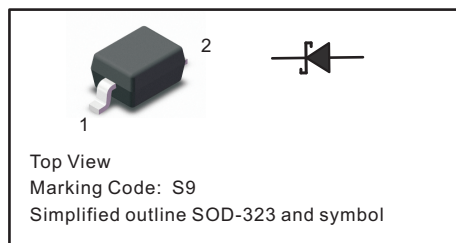
SCHOTTKY BARRIER RECTIFIERS

FEATURES

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

MECHANICAL DATA

▪Case: SOD-323
▪Terminals: Solderable per MIL-STD-750, Method 2026
▪Approx. Weight: 5.48mg / 0.00019oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

Top View
Marking Code: S9
Simplified outline SOD-323 and symbol

Maximum Ratings at 25 °C

Parameter	Symbols	BAT46WS	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Working peak reverse voltage	V_{RWM}	100	V
Continuous Forward Current	I_F	150	mA
Repetitive peak forward current (Note 1) @ tp < 1.0s, Duty Cycle < 50%	I_{FRM}	350	mA
Non-reptitive Peak Forward Surge Current at 8.3ms	I_{FSM}	25	A
Power Dissipation	P_D	200	mW
Thermal resistance junction to ambient air	R_{thJA}	500	°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +125	°C

ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

Parameter		Symbols	BAT46WS	Units
Reverse BreakdownVoltage at I_R=100μA(NOTE 2)		$V_{(BR)R}$	100	V
Maximum Forward Voltage (NOTE 2)	IF1=10 m A IF2= 250 m A	V_F	0.45 1.0	V
Peak Reverse Current	V_{R1}=1.5V V_{R2}=10V V_{R3}=50V V_{R4}=75V	I_R	0.3 0.5 1 2	μA
Diodes Capacitance	V_R=0,f=1MHz V_R=1V,f=1MHz	C_T	20 12	pF

NOTES:
（1）Part mounted on FR-4 board with recommended pad layout.
（2）Short duration pulse test used to minimize self-heating effect.
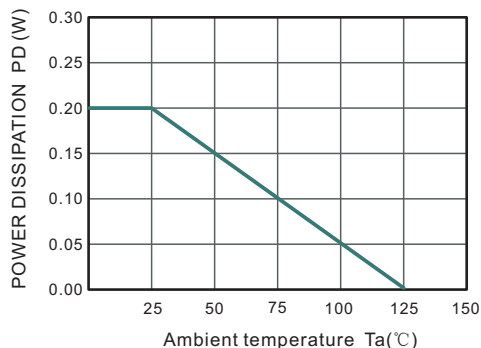
Fig.1 Power Derating Curve
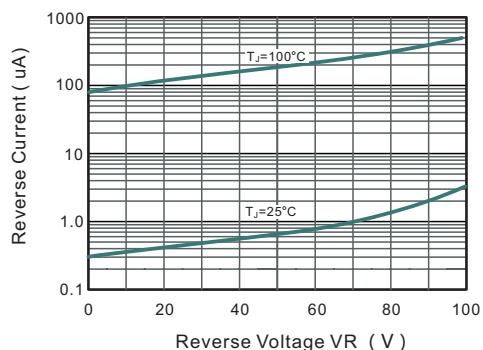
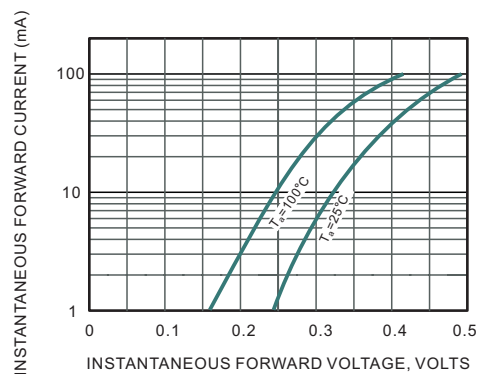Fig.2 Typical Reverse Characteristics

Fig.2 TYPICAL FORWARD VOLTAGE

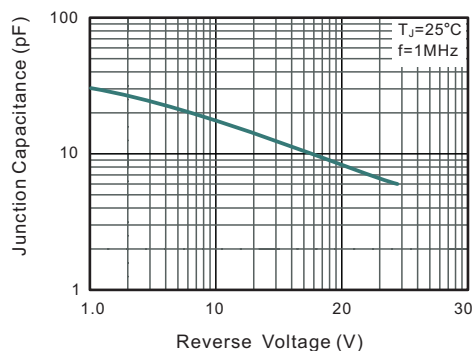Fig.3 Typical Junction Capacitance

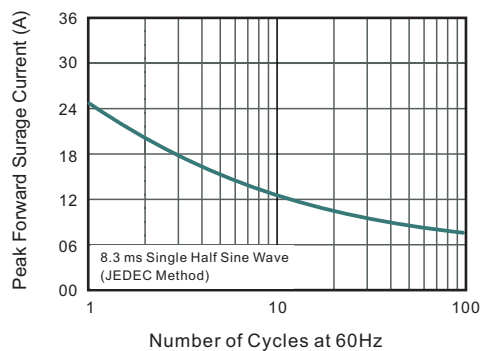Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

Fig.6 Typical Transient Thermal Impedance
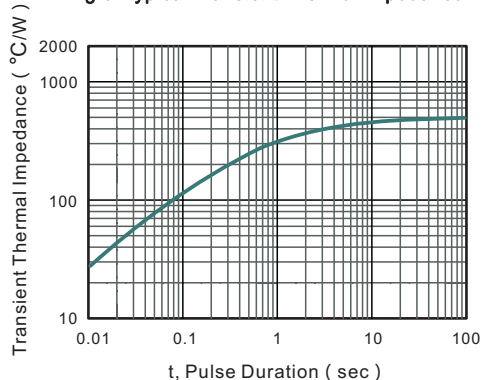
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads
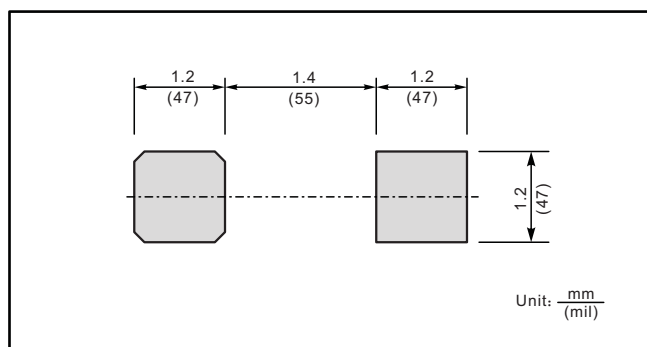
SOD-323

∠ALL ROUND

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	—	
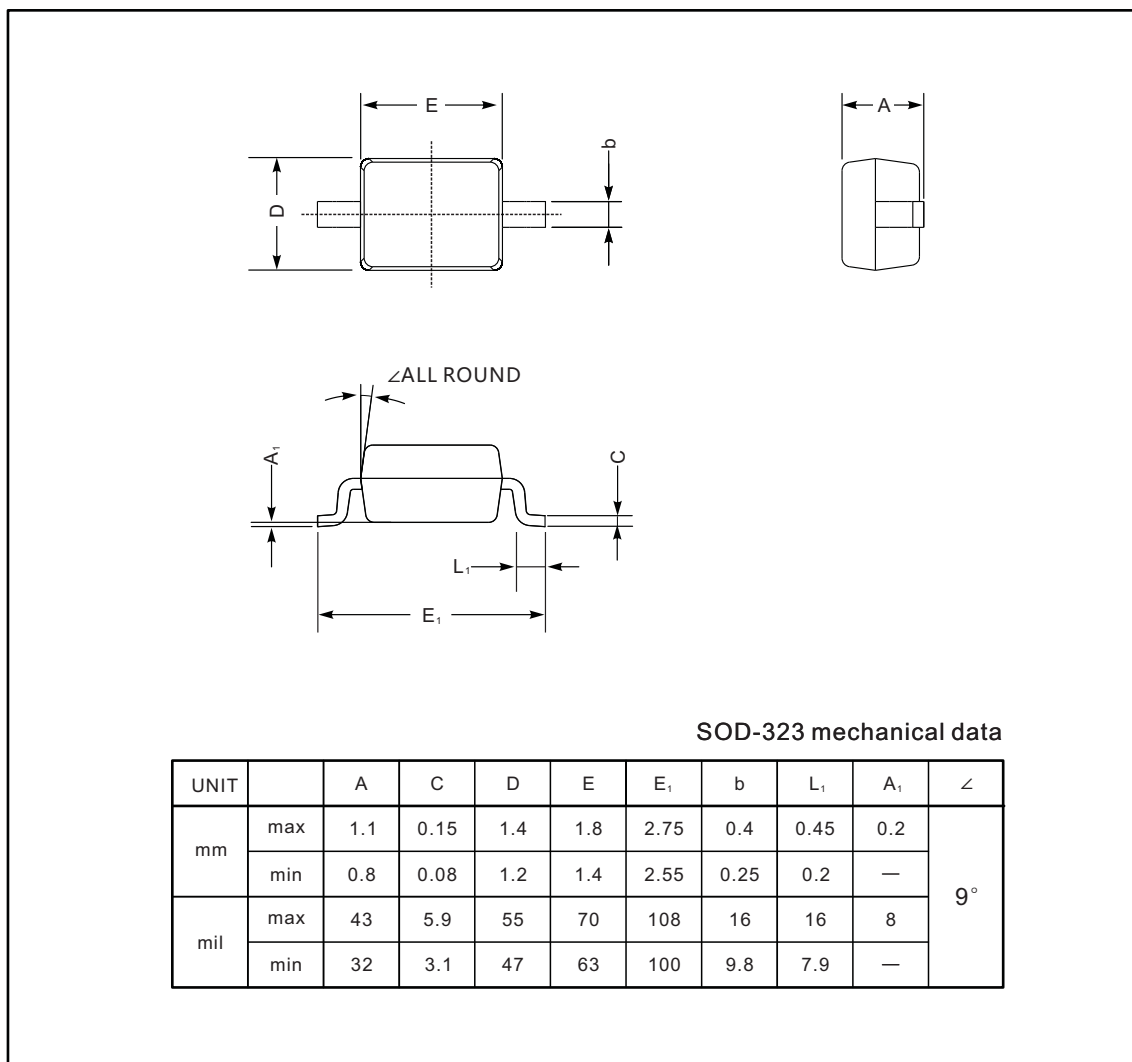
The recommended mounting pad size

1.2
(47)

1.4
(55)

1.2
(47)

1.2
(47)

Unit: $\frac{mm}{(mil)}$

Marking

Type number	Marking code
BAT46WS	S9

单击下面可查看定价，库存，交付和生命周期等信息

>>JINGDAO(晶导)