BAS16WS

SOD-323 Plastic-Encapsulate Switching Diode

SOD-323

FEATURES

- For surface mounted applications
- Fast reverse recovery time
- Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

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

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	BAS16WS	Units
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	V_{RMS}	53	V
Forward Continuous Current (Note 1)	I_{FM}	300	mA
Average Rectified Output Current (Note 1)	I_O	150	mA
Non-Repetitive Peak Forward Surge Current t=1.0us t=1.0s	I_{FSM}	2.0 1.0	A
Total power dissipation	P_D	200	mW
Peak Reverse Leakage Current	I_R	1 @V_R=75V	uA
Maximum Instantaneous Forward Voltage	V_F	0.855 @ I_F=10mA	V
Total capacitiance V_R=0V,f=1MHz	C_{tot}	2	pF
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	625	°C/W
Maximum Reverse Recovery Time (2)	t_{rr}	6	ns
Operating and Storage Temperature Range	T_j,T_{stg}	-55 ~ +150	℃

NOTE:
(1)Valid provided that terminals are kept at ambient temperature.
(2) IF=IR=10mA,Irr=0.1×IR,RL=100Ω

Typical Characteristics

Fig.1 Power Derating Curve

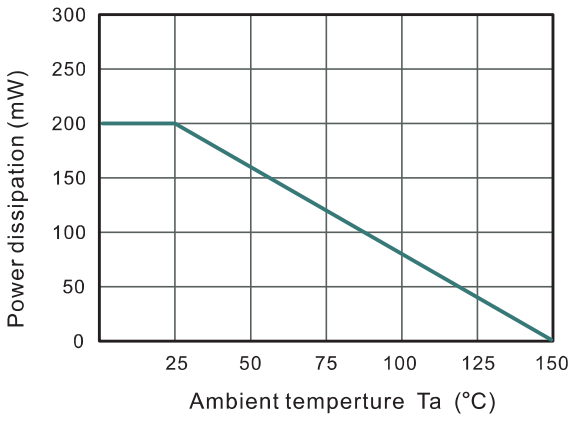


Fig.2 Typical Reverse Characteristics

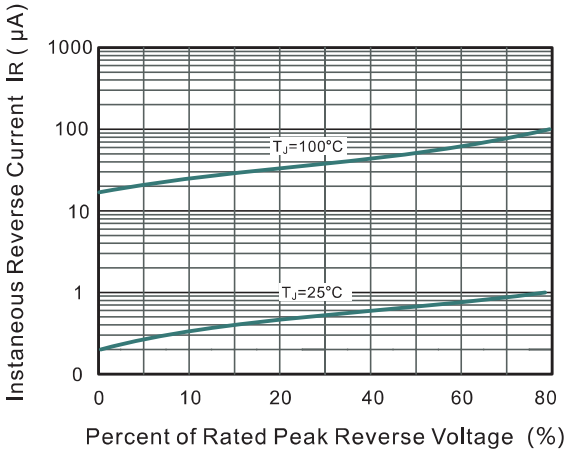


Fig.3 TYPICAL FORWARD VOLTAGE

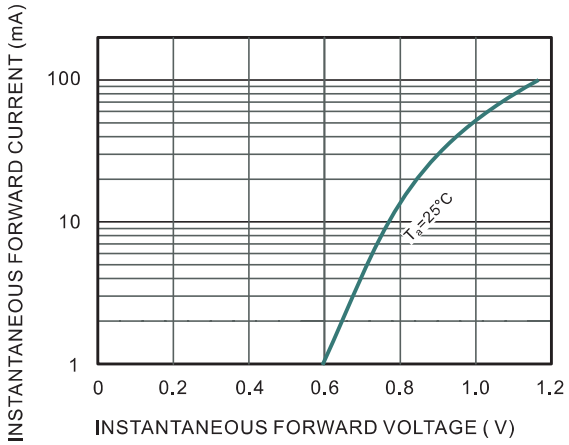


Fig.4 Typical Junction Capacitance

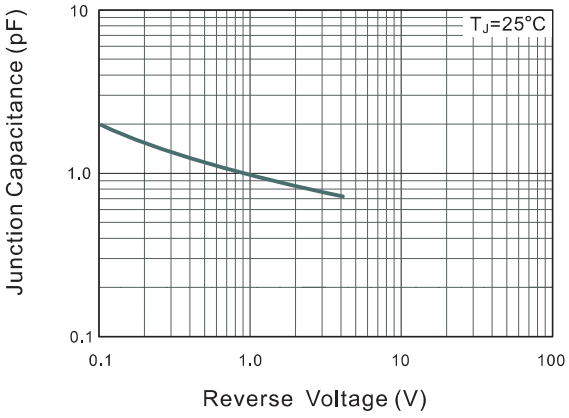
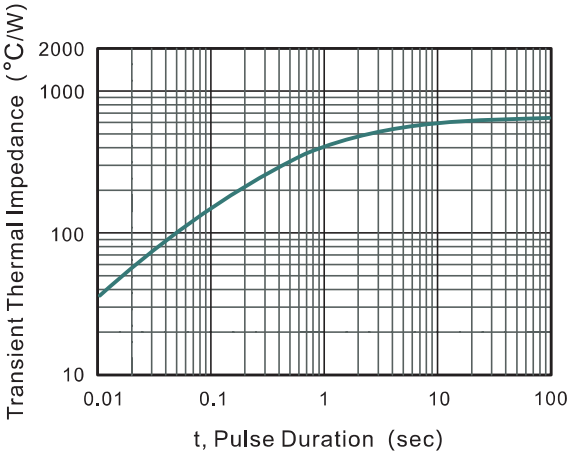


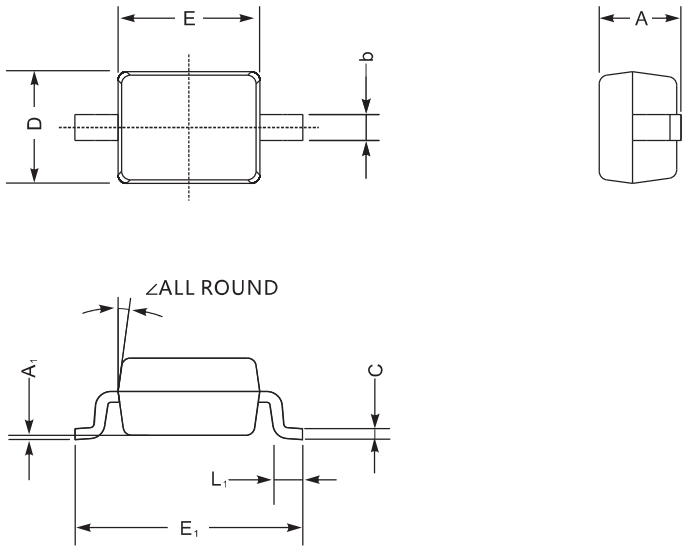
Fig.5 Typical Transient Thermal Impedance



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

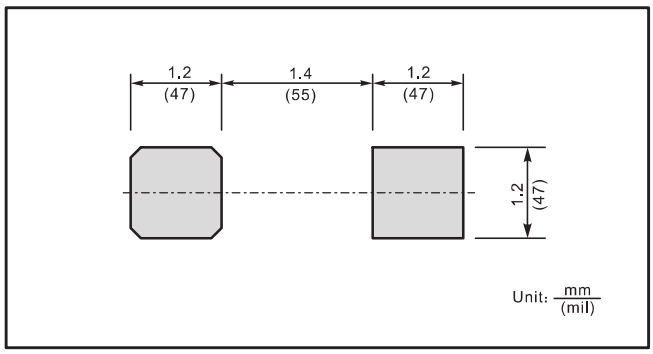
SOD-323



SOD-323W 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	55	100	9.8	7.9	—	

The recommended mounting pad size



Marking

Type number	Marking code
BAS16WS	A6