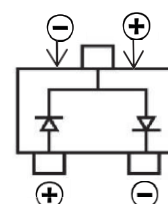
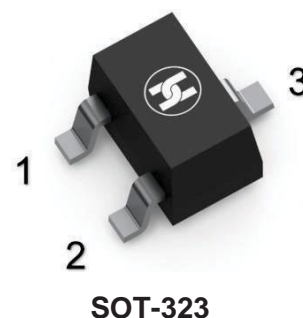


SWITCHING DIODE
FEATURES

- Fast Switching
- High Conductance
- Surface Mount device
- For General Purpose Switching Applications



BAV99W :A7*

MECHANICAL DATA

- Case: SOT-323
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 0.008 grams (approximate)

MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Rating	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Continuous Reverse Voltage	V _R	75	
Forward Current (Double Diode Loaded)	I _F	125	mA
Forward Current (Single Diode Loaded)		215	
Repetitive Peak Forward Current	I _{FRM}	450	
Non-repetitive Peak Forward Surge Current	I _{FSM}	t=1s 0.5	A
		t=1ms 1	
		t=1us 1.5	
Power Dissipation	P _d	200	mW
Junction Temperature	T _J	150	?
Storage Temperature range	T _{stg}	-65 to 150	

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

Parameter	Symbol	Min	Max	Unit	Conditions
Reverse breakdown voltage	V _(BR)	100		V	I _R =100uA
Reverse voltage leakage current	I _R		1	uA	V _R =70V
Forward voltage	V _{F1}		0.715	V	I _{F1} =1 mA
	V _{F2}		0.855	V	I _{F2} =10 mA
	V _{F3}		1	V	I _{F3} =50mA
	V _{F4}		1.25	V	I _{F4} =150 mA
Diode capacitance	C _D		1.5	pF	V _R =0V, f=1MHz
Reverse recovery time	T _{rr}		4	nS	I _F =I _R =10mA I _{rr} =0.1×I _R R _L =100Ω

SWITCHING DIODE

Typical Characteristics

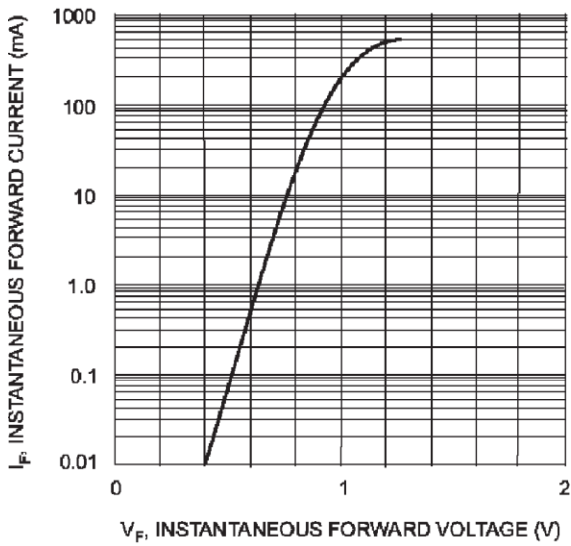


Fig. 1 Forward Characteristics

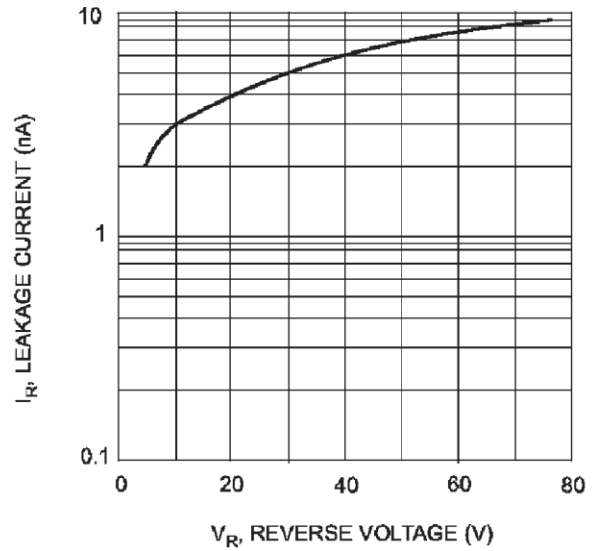


Fig. 2 Typical Leakage Current vs Reverse Voltage

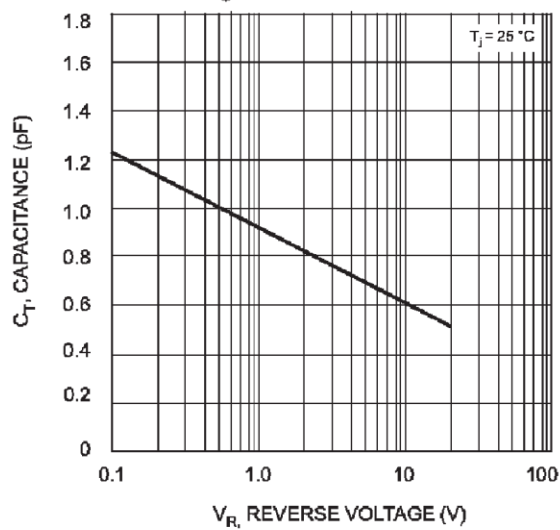
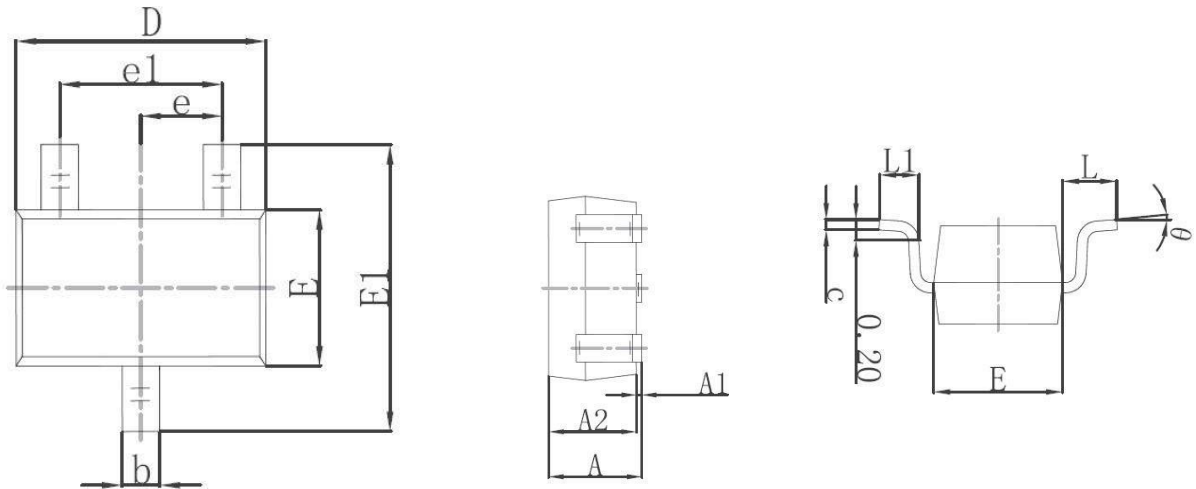


Fig. 3 Typical Total Capacitance vs Reverse Voltage

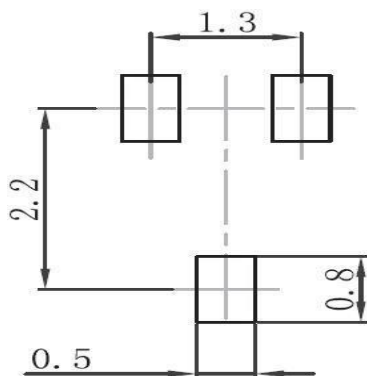
SWITCHING DIODE

SOT-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650TYP		0.026TYP	
e1	1.200	1.400	0.047	0.055
L	0.525REF		0.021REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

SOT-323 Suggested Pad Layout



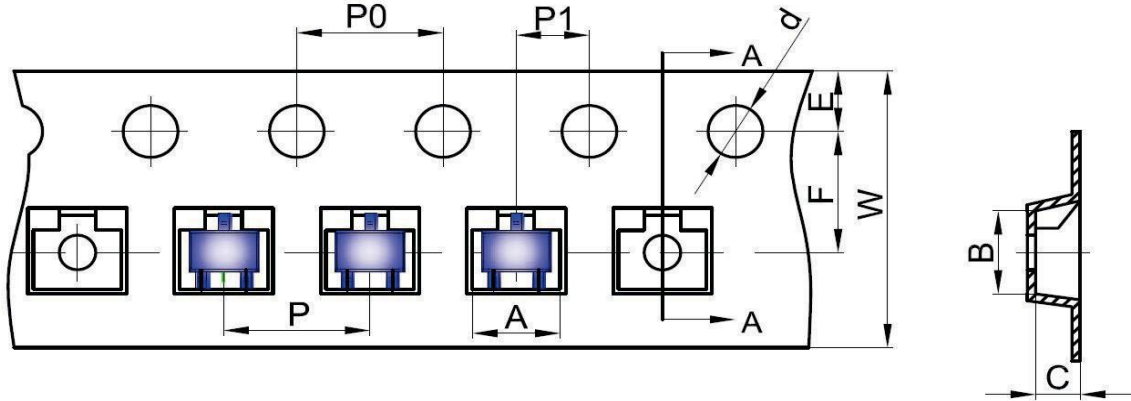
Note:

1. Controlling dimension: in millimeters
2. General tolerance: ±0.05mm
3. The pad layout is for reference purposes only

SWITCHING DIODE

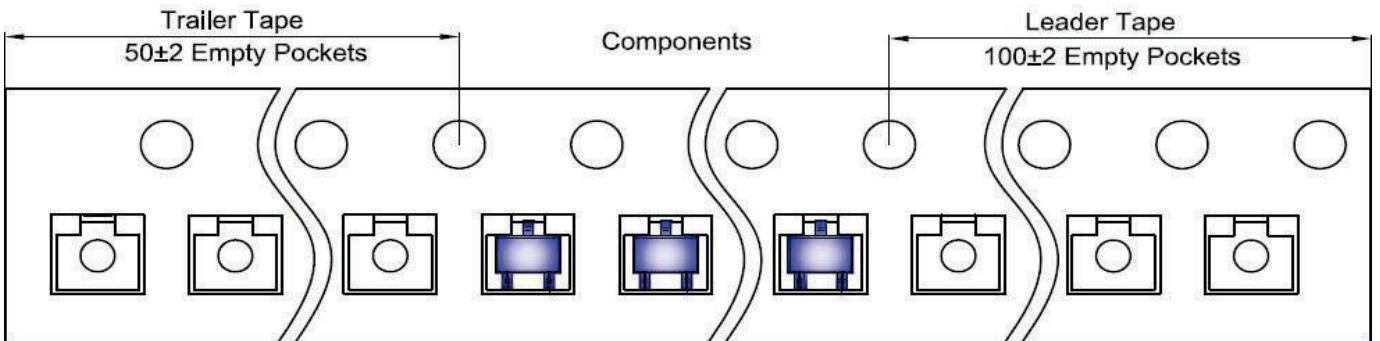
SOT-323 Tape and Reel

SOT-323 Embossed Carrier Tape

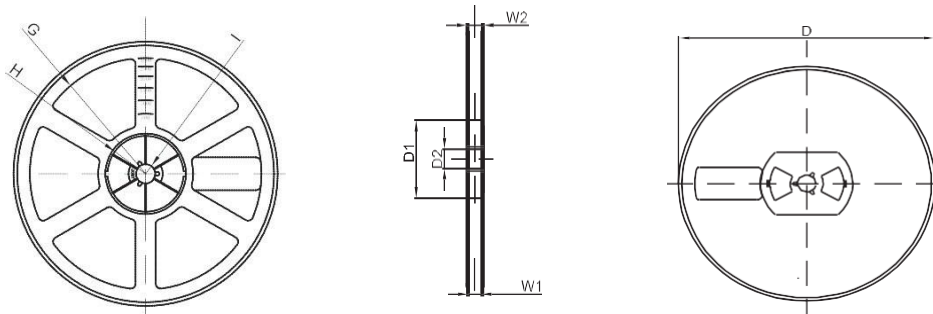


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
SOT-323	2.25	2.55	1.19	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

SOT-323 Tape Leader and Trailer



SOT-323 Reel



DIMENSIONS ARE IN MILLIMETER								
REEL OPTION	D	D1	D2	G	H	I	W1	W2
7" DIA	Ø178	54.40	13.00	R78	R25.60	R6.50	9.50	12.30
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1