

■ **FEATURES**

- V_R 100V/150V/200V
- I_{FAV} 200mA

■ **TYPICAL APPLICATIONS**

- Extreme fast switches

■ **MECHANICAL DATA**

- **Package:** SOD-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

	Marking
BAV19WS	A8
BAV20WS	T2
BAV21WS	T3

■ **MAXIMUM RATINGS** ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE	
Repetitive peak reverse voltage	V_{RRM}	V		BAV19WS	120
				BAV20WS	200
				BAV21WS	250
Non-Repetitive Peak Forward Surge Current	I_{FSM}	A	$t=1\text{s}$ $t=1\mu\text{s}$	0.5 2.5	
Average forward current	I_{FAV}	mA		200	
Power dissipation	P_{tot}	mW		250	
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	$^\circ\text{C}/\text{W}$		500	
Maximum junction temperature	T_j	$^\circ\text{C}$		-65 to +150	
Storage temperature range	T_{stg}	$^\circ\text{C}$		-65 to +150	

■ **ELECTRICAL CHARACTERISTICS** ($T_a=25^\circ\text{C}$ Unless otherwise specified)

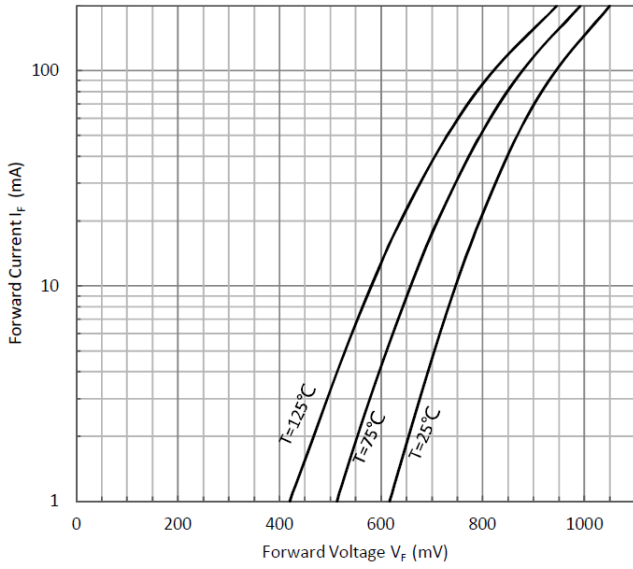
PARAMETER	SYMBOL	UNIT	Conditions		VALUE
Maximum Forward voltage	V_F	V	$I_F=100\text{mA}$		1.0
			$I_F=200\text{mA}$		1.25
Maximum Reverse current	I_R	nA	BAV19WS	$V_R=100\text{V}$	100
			BAV20WS	$V_R=150\text{V}$	
			BAV21WS	$V_R=200\text{V}$	
Minimum Breakdown voltage	$V_{(BR)}$	V	BAV19WS	$I_R=10\mu\text{A}$	100
			BAV20WS	$I_R=10\mu\text{A}$	150
			BAV21WS	$I_R=10\mu\text{A}$	200
Maximum Diode capacitance	C_D	pF	$V_R=0\text{V}, f=1\text{MHz}$		5
Maximum Reverse recovery time	t_{rr}	ns	$I_F=I_R=30\text{mA}, R_L=100\Omega, I_{RR}=3\text{mA}$		50

■ **PACKAGING INFORMATION**

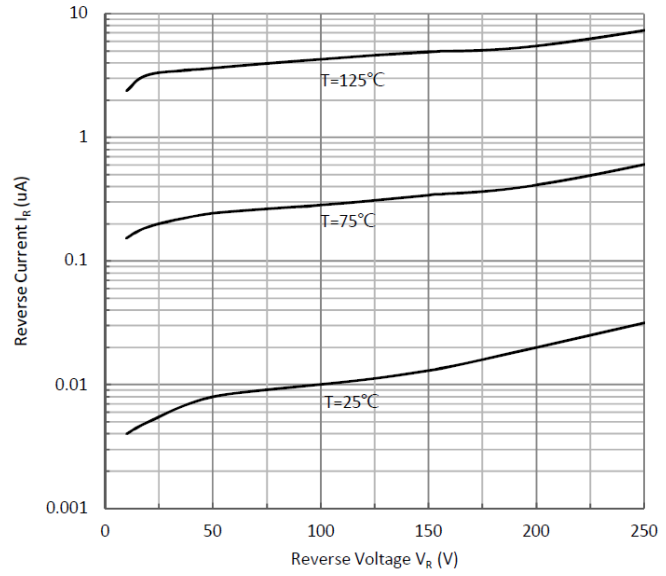
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAV19WS THRU BAV21WS	F2	Approximate 0.004	3000	30000	120000	7" reel

■ **CHARACTERISTICS (TYPICAL)**

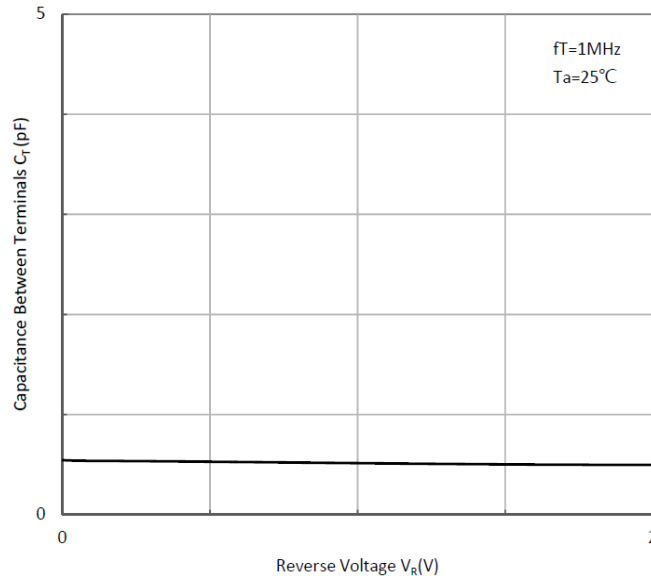
Forward Characteristics



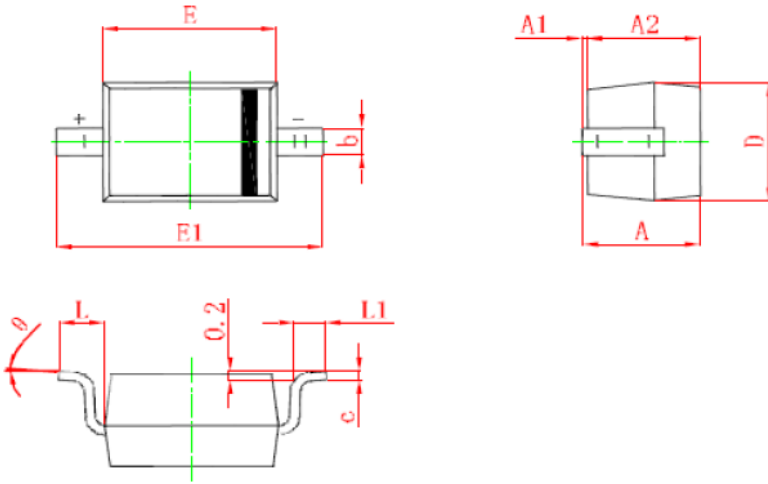
Reverse Characteristics



Capacitance Characteristics

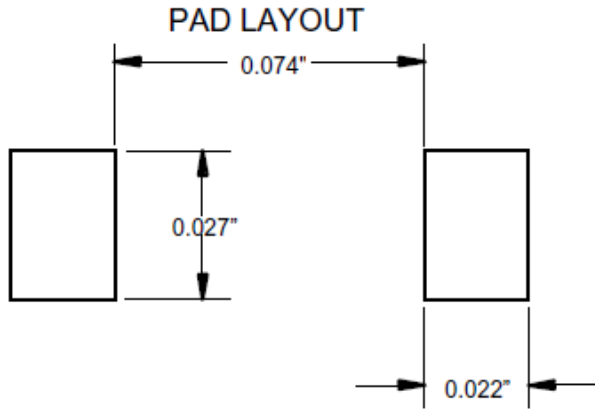


■ SOD-323 PACKAGE OUTLINE DIMENSIONS



Symbol	Min. (mm)	Max. (mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.400
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°

■ SOD-323 SUGGESTED PAD LAYOUT



Unit: inches