

■ **FEATURES**

- VR 100V/150V/200V
- I<sub>FAV</sub> 200mA

■ **TYPICAL APPLICATIONS**

- Extreme fast switches

■ **MECHANICAL DATA**

- **Package:** SOD123
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

	Marking
BAV19W	A8
BAV20W	T2
BAV21W	T3

■ **MAXIMUM RATINGS** (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE	
Repetitive peak reverse voltage	V <sub>RRM</sub>	V		BAV19W	120
				BAV20W	200
				BAV21W	250
Average forward current	I <sub>FAV</sub>	mA		200	
Non-Repetitive Peak Forward Surge Current	I <sub>FSM</sub>	A	t<1s	1	
Power dissipation	P <sub>tot</sub>	mW		400	
Maximum junction temperature	T <sub>j</sub>	°C		-65 to +150	
Storage temperature range	T <sub>stg</sub>	°C		-65 to +150	

■ **ELECTRICAL CHARACTERISTICS** (T<sub>a</sub>=25°C Unless otherwise specified)

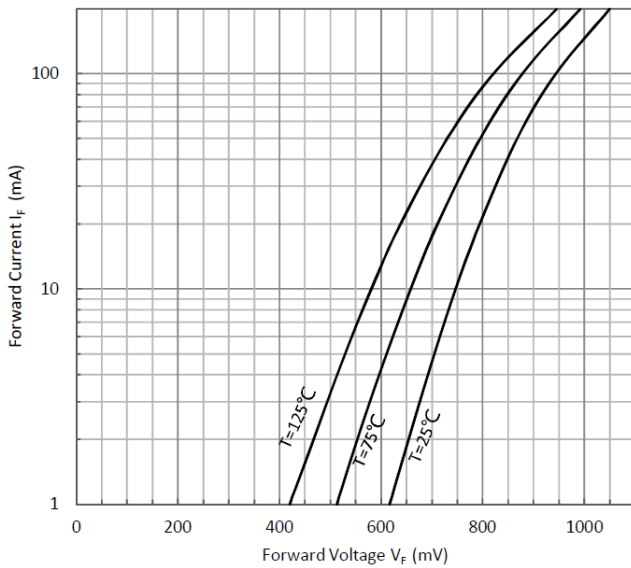
PARAMETER	SYMBOL	UNIT	Conditions	VALUE	
Maximum Forward voltage	V <sub>F</sub>	V	I <sub>F</sub> =100mA	1.0	
			I <sub>F</sub> =200mA	1.25	
Maximum Reverse current	I <sub>R</sub>	nA	BAV19W	100	
			BAV20W		
			BAV21W		
Minimum Breakdown voltage	V <sub>(BR)</sub>	V	BAV19W	I <sub>R</sub> =10uA	100
			BAV20W	I <sub>R</sub> =10uA	150
			BAV21W	I <sub>R</sub> =10uA	200
Maximum Diode capacitance	C <sub>D</sub>	pF	V <sub>R</sub> =0V, f =1MHz	5	
Maximum Reverse recovery time	t <sub>rr</sub>	ns	I <sub>F</sub> =I <sub>R</sub> =30 mA, R <sub>L</sub> =100Ω, I <sub>RR</sub> =3mA	50	

■ **PACKAGING INFORMATION**

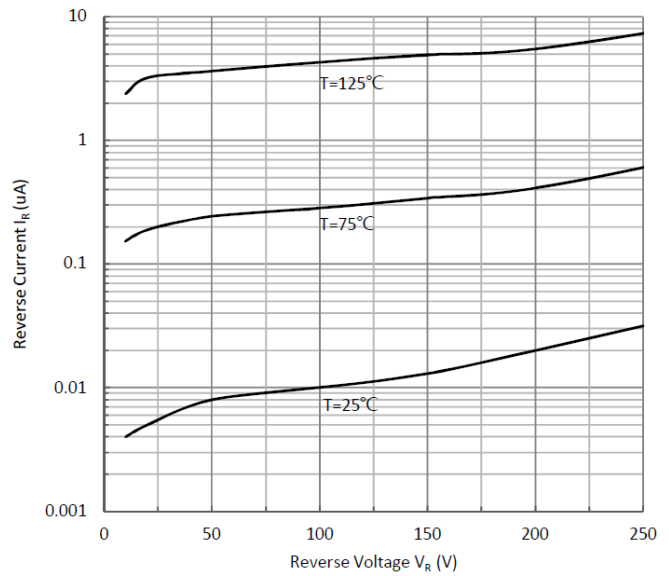
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAV19W Thru BAV21W	F2	Approximate 0.011	3000	30000	120000	7" reel

■ **CHARACTERISTICS (TYPICAL)**

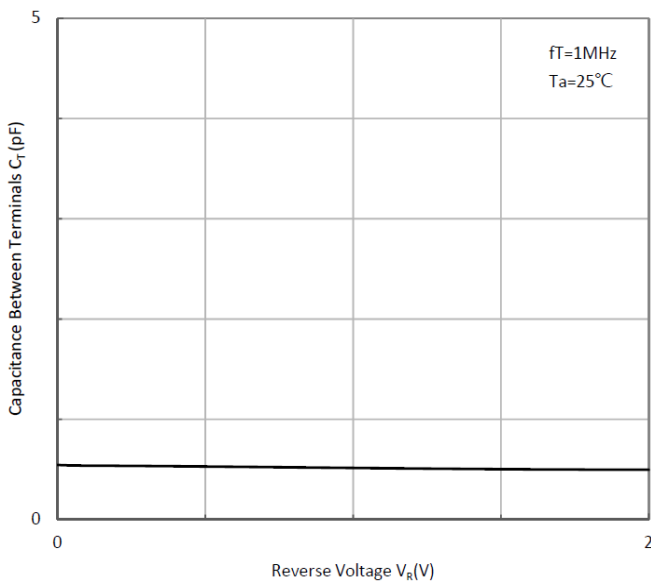
Forward Characteristics



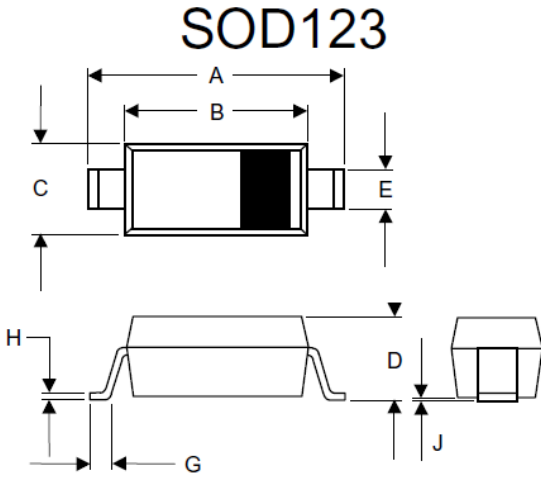
Reverse Characteristics



Capacitance Characteristics

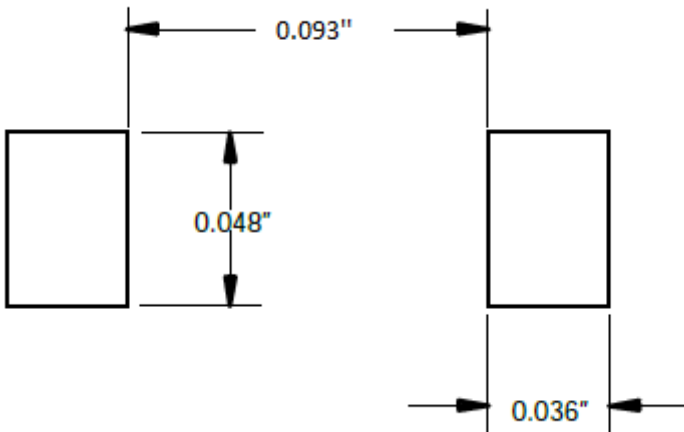


■ **OUTLINE DIMENSIONS**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.140	0.152	3.55	3.85	
B	0.100	0.112	2.55	2.85	
C	0.055	0.071	1.40	1.80	
D	0.020	0.053	0.50	1.35	
E	0.012	0.031	0.30	0.78	
G	0.006	0.020	0.15	0.50	
H	0.002	0.010	0.05	0.25	
J	0	0.006	0	0.15	

■ **SUGGESTED PAD LAYOUT**



Unit: inch