

### FEATURES

- Silicon epitaxial planar diode
- For General Purpose
- This diode is also available in other case
- Small Signal Diodes

#### SOD-123

#### SOD-123FL



### MECHANICAL DATA

- Case: SOD-123, SOD-123FL plastic case
- Weight: Approx. 0.01 gram

### Absolute Maximum Ratings $T_a=25^{\circ}\text{C}$

Parameter	Symbol	BAV19W	BAV20W	BAV21W	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	120	200	250	V
Continuous Reverse Voltage	V <sub>R</sub>	100	150	200	
Forward DC Current	I <sub>F</sub>	250			mA
Averaged Forward Current	I <sub>FAV</sub>	200			
Repetitive Peak Forward Current @ f>50Hz,	I <sub>FRM</sub>	625			
Surge Forward Current @ t<1s	I <sub>FSM</sub>	1			A
Power Dissipation	P <sub>D</sub>	410			mW
Thermal Resistance Junction to Ambient	R <sub>thJA</sub>	375			
Junction Temperature	T <sub>j</sub>	150			°C
Storage Temperature	T <sub>stg</sub>	-55 to 150			

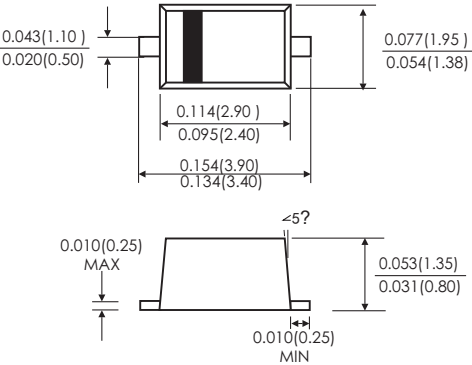
RATINGS AND CHARACTERISTIC CURVES BAV19W BAV20W BAV21W

ELECTRICAL CHARACTERISTICS Ta=25°C

Parameter		Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	BAV19W	V <sub>(BR)</sub>	I <sub>R</sub> = 1mA	120			V
	BAV20W			200			
	BAV21W			250			
Forward voltage		V <sub>F</sub>	I <sub>F</sub> = 100 mA			1	
			I <sub>F</sub> = 200 mA			1.25	
Reverse voltage leakage current	BAV19W	I <sub>R</sub>	V <sub>R</sub> = 100V			100	nA
	BAV19W		V <sub>R</sub> = 100V, T <sub>J</sub> = 100°C			15	uA
	BAV20W		V <sub>R</sub> = 150V			100	nA
	BAV20W		V <sub>R</sub> = 150V, T <sub>J</sub> = 100°C			15	uA
	BAV21W		V <sub>R</sub> = 200V			100	nA
	BAV21W		V <sub>R</sub> = 200V, T <sub>J</sub> = 100°C			15	uA
Dynamic Forward Resistance		r <sub>f</sub>	I <sub>F</sub> = 10 mA		5		Ω
Reverse Recovery Time		t <sub>rr</sub>	I <sub>F</sub> = I <sub>R</sub> = 30mA, I <sub>rr</sub> = 3mA, R <sub>L</sub> = 100mΩ			50	ns
Diode capacitance		C <sub>D</sub>	V <sub>R</sub> = 0V, f = 1MHz		1.5		pF

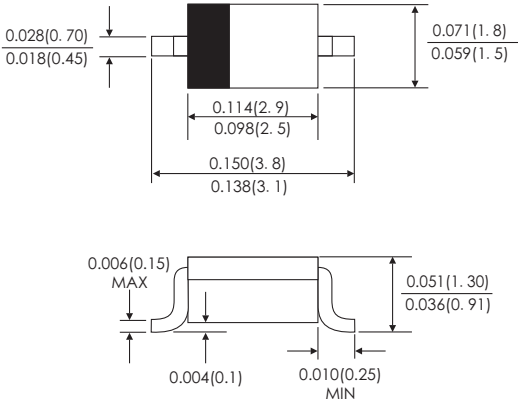
Dimensions

SOD-123FL



Dimensions in inches and (millimeters)

SOD-123



Dimensions in inches and (millimeters)

# RATINGS AND CHARACTERISTIC CURVES BAV19W BAV20W BAV21W

