

PIN

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PINNING

#### **Features**

- For surface mounted applications
- Glass passivated chip junction
- Fast reverse recovery time
- Ideal for auto mated placement
- Lead free in comply with EU RoHS 2011/65/EU directives

# 2 Simplified outline SOD-123 and symbol

**DESCRIPTION** 

Cathode

Anode

## **Ordering Information**

Ordering Number	Marking	Package
BAV19W	A8	SOD-123
BAV20W	T2	SOD-123
BAV21W	Т3	SOD-123

## Absolute Maximum Ratings(T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	BVA19W	BAV20W	BAV21W	Units	
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	120 200		250	V
Maximum RMS Voltage		V <sub>RMS</sub>	100	150	200	V
Continuous Forward Current		$I_{\mathrm{F}}$		mA		
Repetitive Peak Forward Current		I <sub>FRM</sub>		mA		
Peak Forward Surge Current	at 1s	I <sub>FSM</sub>		A		
	at 1ms					
	at 1µs					
Total Power Dissipation		P <sub>tot</sub>	500			mW
Operating and Storage Temperature Range		T <sub>J</sub> ,T <sub>STG</sub>		°C		

## Electrical Characteristics(T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	BVA19W	BAV20W	BAV21W	Units	
Reverse Breakdown Voltage at I <sub>R</sub> = 100uA		V(BR)R	120	200	250	V
Maximum Forward Voltage	at 100mA	17		V		
	at 200mA	$V_{\mathrm{F}}$	1.25			
Maximum DC Reverse Current	T <sub>A</sub> =25°C	I <sub>R</sub>		μΑ		
at Rated DC Blocking Voltage	T <sub>A</sub> =150°C			100		
Typical Junction Capacitance at $V_R = 4V$ , $f = 1MHz$		CJ	5			pF
Maximum Reverse Recovery Time		t <sub>rr</sub>	50			ns

REV08.1 1/4



## **Typical Characteristic**

Fig.1 Forward Current Derating Curve

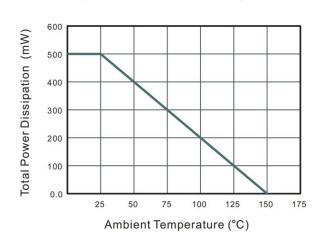


Fig.2 Typical Reverse Characteristics

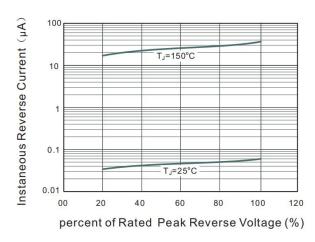


Fig.3 Typical Instaneous Forward Characteristics

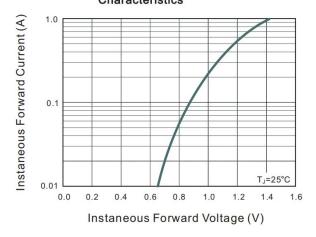
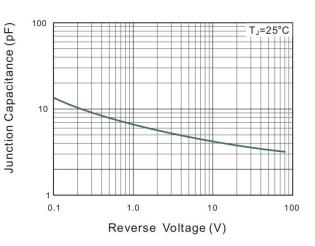


Fig.4 Typical Junction Capacitance



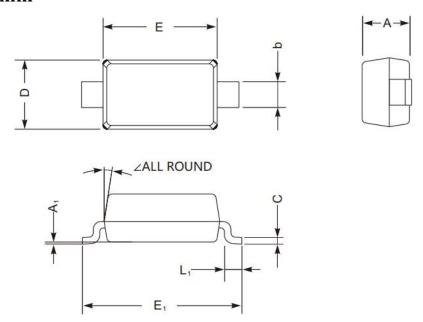
REV08.1 2 / 4



## **Package Information**

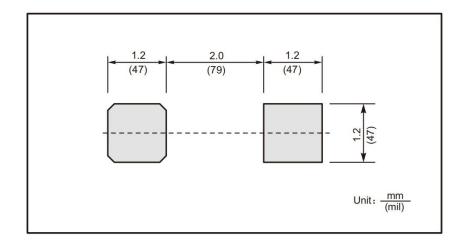
## **SOD-123**

#### **Dimensions in mm**



Unit		А	С	D	E	E <sub>1</sub>	L <sub>1</sub>	b	A <sub>1</sub>	_
mm	max	1.3	0.22	1.8	2.8	3.9	0.45	0.7	0.2	
	min	0.9	0.09	1.5	2.5	3.6	0.25	0.5	-	00
mil	max	51	8.7	71	110	154	18	28	8	9°
	min	35	3.5	59	98	142	10	20	-	

#### The recommended mounting pad size



REV08.1 3/4



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REV08.1 4 / 4