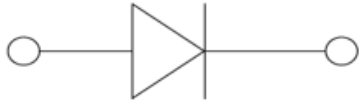


## Small Signal Switching Diodes



**SOD323**

### Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- $V_{RRM}$  120V to 250V
- $I_{FAV}$  200mA
- Part no. with suffix "Q" means AEC-Q101 qualified

### Applications

- General Purpose Switches Diodes

### Mechanical Data

- **Case:** SOD323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:**

	Marking
BAV19WSQ	A8
BAV20WSQ	T2
BAV21WSQ	T3

### ■ Maximum Ratings ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS	PART	VALUE
Reverse Voltage	$V_R$	V		BAV19WSQ	100
				BAV20WSQ	150
				BAV21WSQ	200
Repetitive Peak Reverse Voltage	$V_{RRM}$	V		BAV19WSQ	120
				BAV20WSQ	200
				BAV21WSQ	250
Average Forward Current	$I_{FAV}$	mA			200
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	A	$t_p < 10\text{ms}$		1.7
Power Dissipation	$P_{tot}$	mW			250
Thermal Resistance Junction to Ambient	$R_{thJA}$	K/W			500
Maximum Junction Temperature	$T_j$	$^\circ\text{C}$			150
Storage Temperature Range	$T_{stg}$	$^\circ\text{C}$			-55 to +150



# BAV19WSQ THRU BAV21WSQ

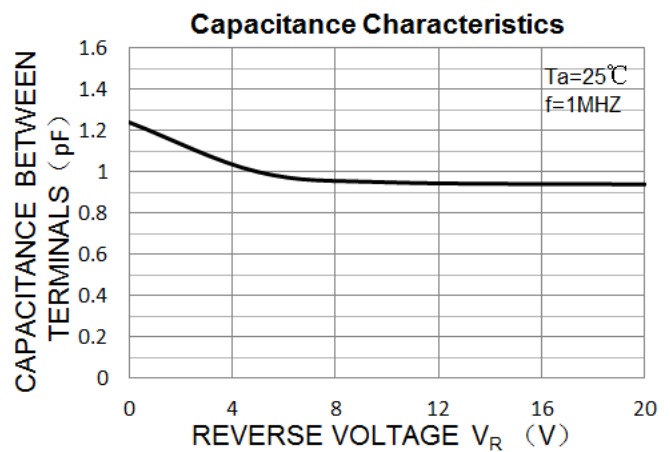
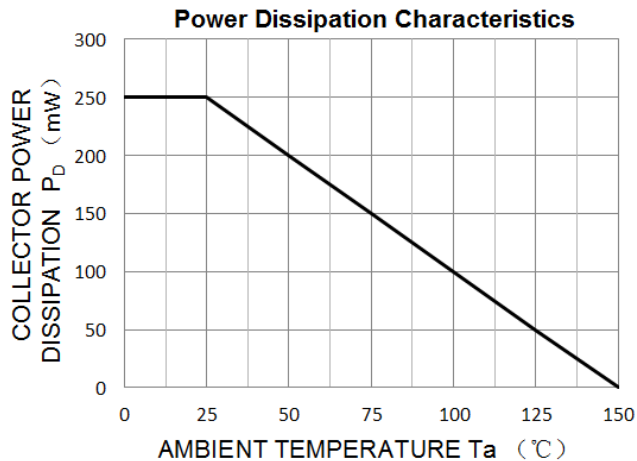
## ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS		MIN	MAX
Reverse Voltage	V <sub>R</sub>	V	BAV19WSQ	I <sub>R</sub> =100uA	100	
			BAV20WSQ	I <sub>R</sub> =100uA	150	
			BAV21WSQ	I <sub>R</sub> =100uA	200	
Forward Voltage	V <sub>F</sub>	V	I <sub>F</sub> =100mA			1.0
			I <sub>F</sub> =200mA			1.25
Reverse Current	I <sub>R</sub>	μA	BAV19WSQ	V <sub>R</sub> =100V		0.1
			BAV20WSQ	V <sub>R</sub> =150V		0.1
			BAV21WSQ	V <sub>R</sub> =200V		0.1
Diode Capacitance	C <sub>D</sub>	pF	V <sub>R</sub> =V <sub>F</sub> =0V, f = 1MHz			5
Reverse Recovery Time	t <sub>rr</sub>	ns	I <sub>F</sub> =30mA, I <sub>rr</sub> =0.1I <sub>R</sub> , R <sub>L</sub> =100Ω			50

## ■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAV19WSQ THRU BAV21WSQ	F2	Approximate 0.0045	3000	30000	120000	7" reel

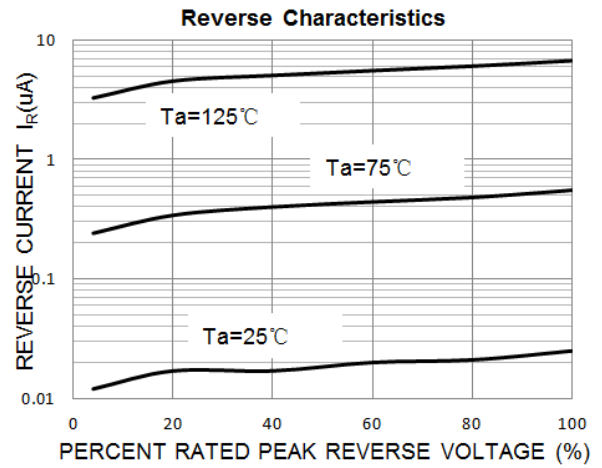
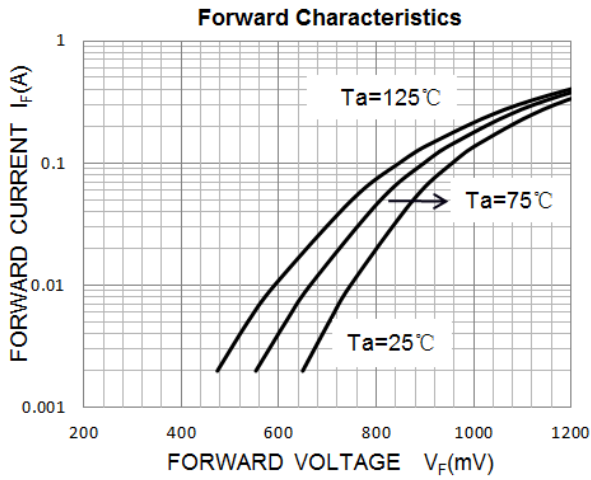
## ■ Characteristics (Typical)



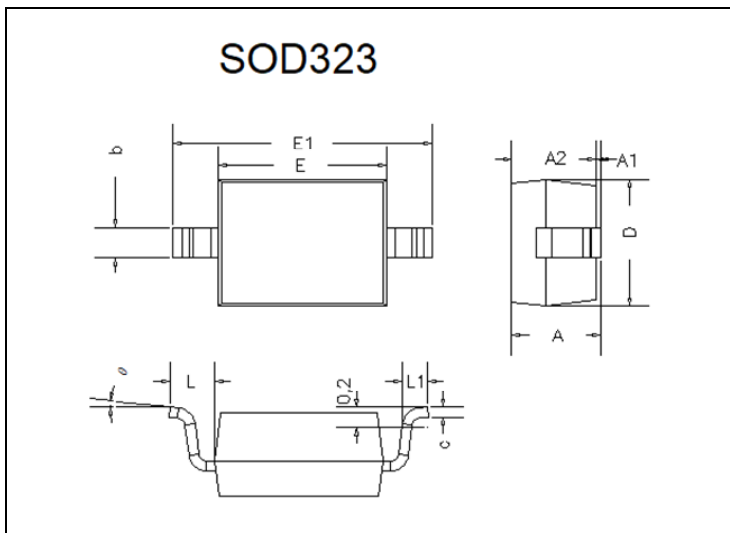


# BAV19WSQ THRU BAV21WSQ

## ■ Characteristics (Typical)

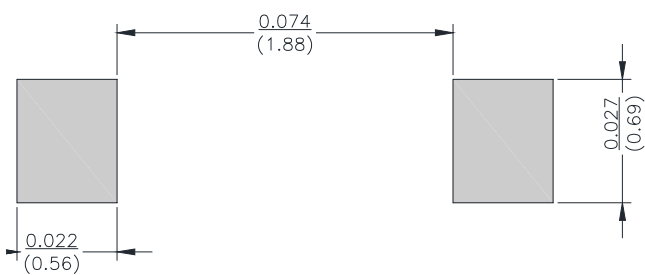


## ■ Outline Dimensions



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	-	0.039	-	1.00	
A1	0.000	0.004	0.00	0.10	
A2	0.031	0.035	0.80	0.90	
b	0.010	0.016	0.25	0.40	
c	0.003	0.007	0.08	0.17	
D	0.047	0.055	1.20	1.40	
E	0.063	0.071	1.60	1.80	
E1	0.098	0.106	2.50	2.70	
L	0.019REF		0.475REF		
L1	0.008	0.016	0.20	0.40	
θ	0°	8°	0°	8°	

## ■ Soldering Footprint



Unit:  $\frac{\text{inch}}{\text{mm}}$



## BAV19WSQ THRU BAV21WSQ

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