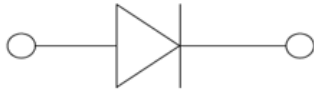


## Small Signal Schottky Diode



**SOD-323**

### Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- Low Turn-on Voltage
- $V_R$  100V
- $I_{FAV}$  0.15A
- Part no. with suffix "Q" means AEC-Q101 qualified

### Mechanical Data

- **Case:** SOD-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** S9

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Repetitive Peak Reverse Voltage	$V_{RRM}$	V		100
Average Forward Current	$I_{FAV}$	mA		150
Peak Forward Surge Current	$I_{FSM}$	A	$t_p=8.3\text{ms}$	0.75
Power Dissipation	$P_{tot}$	mW		200
Thermal Resistance Junction to Ambient	$R_{thJA}$	K/W		500
Maximum Junction Temperature	$T_j$	$^\circ\text{C}$		125
Storage Temperature Range	$T_{stg}$	$^\circ\text{C}$		-55 to +150

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	MAX
Forward Voltage	$V_F$	V	$I_F=0.1\text{mA}$	-	0.25
			$I_F=10\text{mA}$	-	0.45
			$I_F=250\text{mA}$	-	1.00
Reverse Current	$I_R$	$\mu\text{A}$	$V_R=1.5\text{V}$	-	0.3
			$V_R=10\text{V}$		0.5
			$V_R=50\text{V}$		1
			$V_R=75\text{V}$		2
Reverse Breakdown Voltage	$V_{BR}$	V	$I_R=100\mu\text{A}$	100	-
Diode Capacitance	$C_D$	pF	$V_R=0\text{V}, f=1\text{MHz}$	-	20
			$V_R=1\text{V}, f=1\text{MHz}$	-	12

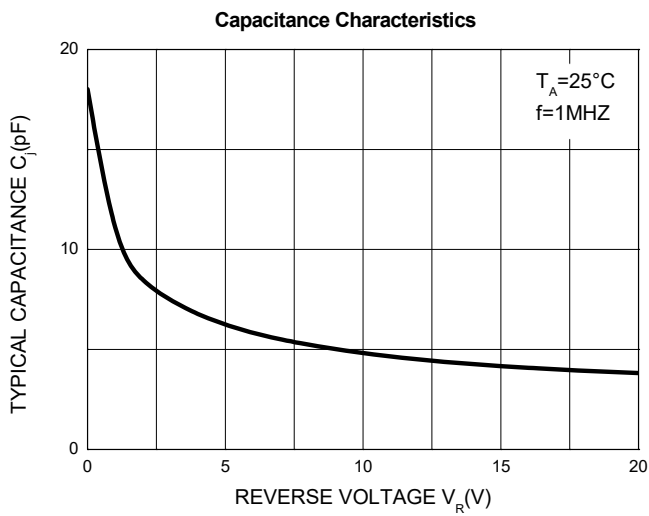
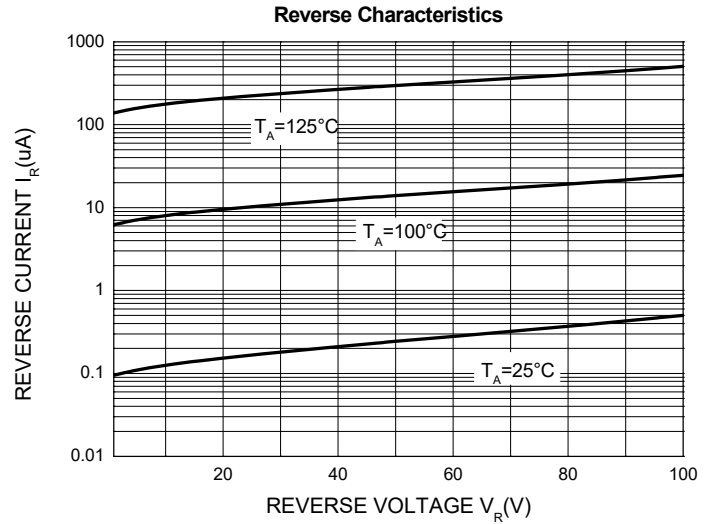
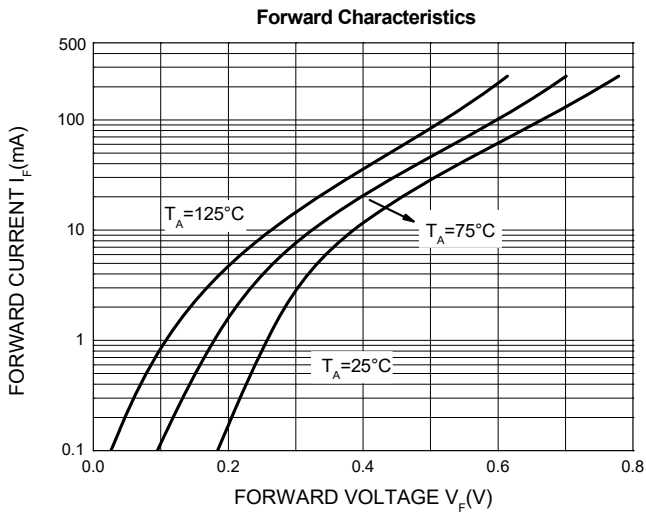


# BAT46WSQ

## Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT46WSQ	F2	Approximate 0.0045	3000	30000	120000	7" reel

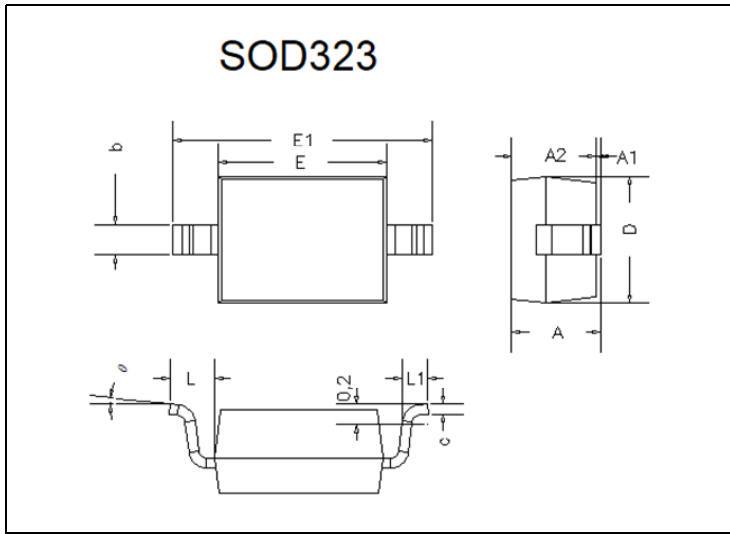
## Characteristics (Typical)





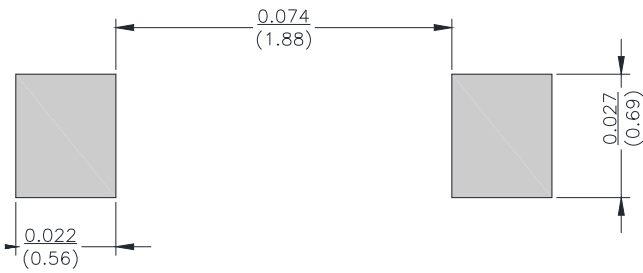
# BAT46WSQ

## ■ 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:  $\frac{\text{inch}}{\text{mm}}$



## BAT46WSQ

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