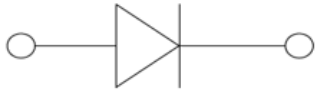


## Small Signal Schottky Rectifier



**SOD323**

### Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- $V_{RRM}$  30V
- $I_{FAV}$  0.5A
- Part no. with suffix "Q" means AEC-Q101 qualified

### Applications

- For Surface Mount Application and High Current Capability
- Automotive

### Mechanical Data

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

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Maximum Repetitive peak reverse voltage	$V_{RRM}$	V		30
DC Blocking Voltage	$V_R$	V		30
Average Forward Current	$I_{FAV}$	A		0.5
Peak Forward Surge Current	$I_{FSM}$	A	8.3ms, half sine	15
Power Dissipation	$P_{tot}$	mW		250
Thermal Resistance Junction to Ambient	$R_{thJA}$	K/W		400
Junction Temperature	$T_J$	$^{\circ}\text{C}$		-55 to +125
Storage Temperature Range	$T_{stg}$	$^{\circ}\text{C}$		-55 to +150



## B0530WSQ

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	MAX
Forward Voltage	V <sub>F</sub>	V	I <sub>F</sub> =100mA		0.375
			I <sub>F</sub> =500mA		0.55
Reverse Leakage Current	I <sub>R</sub>	uA	V <sub>R</sub> =15V		20
			V <sub>R</sub> =30V		100
Reverse Breakdown Voltage	V <sub>BR</sub>	V	I <sub>R</sub> =100uA	30	
Junction Capacitance	C <sub>J</sub>	pF	V <sub>R</sub> =4V, f =1MHz		50
Reverse Recovery Time	t <sub>rr</sub>	ns	I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>rr</sub> =1mA, R <sub>L</sub> =100Ω		30

### ■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
B0530WSQ	F2	Approximate 0.0045	3000	30000	120000	7" reel



## ■ Characteristics (Typical)

Fig.1:  $P_D-T_A$

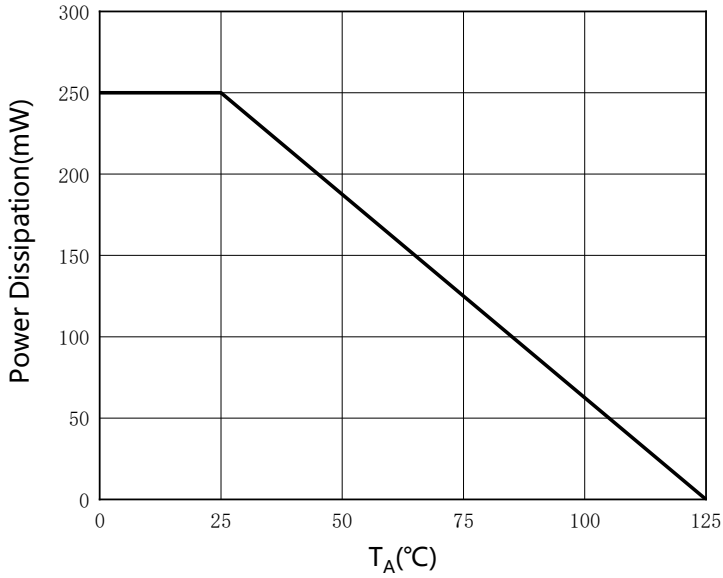


Fig.2: Capacitance Characteristics

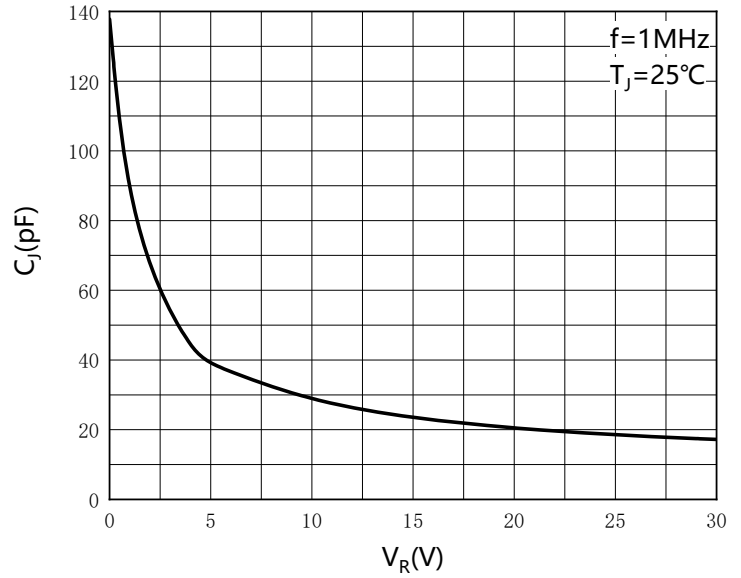


Fig.3: Forward Characteristics

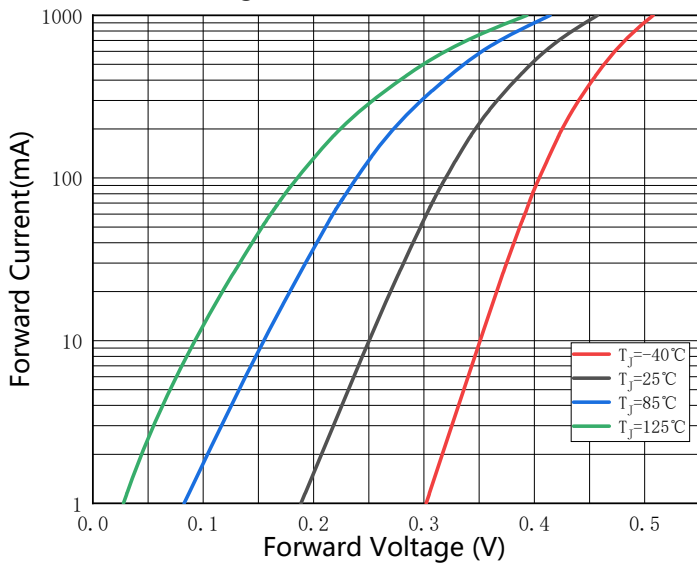
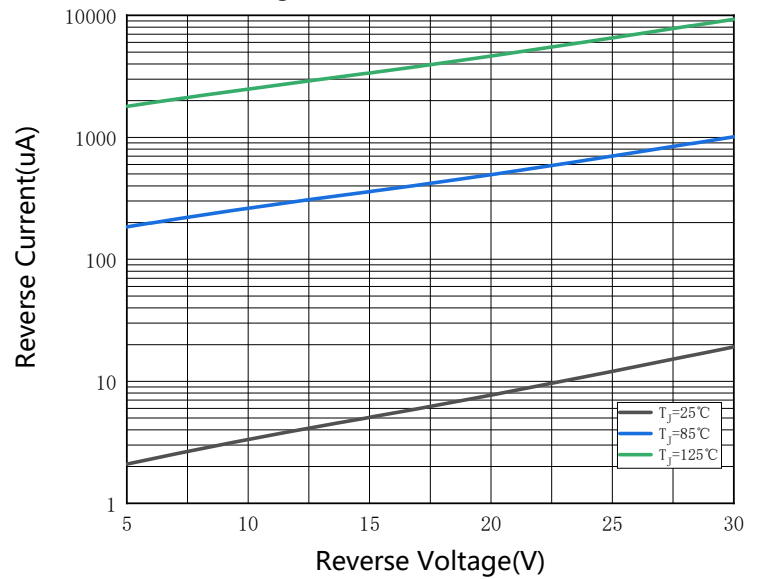


Fig.4: Reverse Characteristics

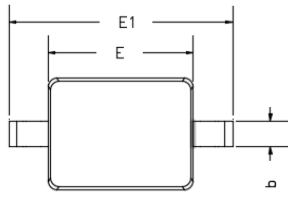




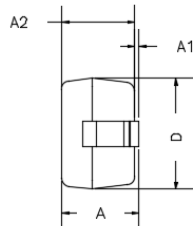
# B0530WSQ

## ■ Outline Dimensions

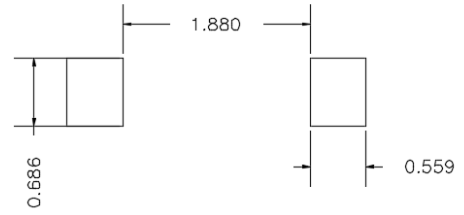
SOD-323



TOP VIEW

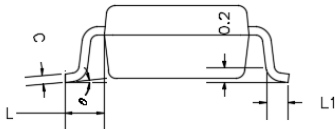


SIDE VIEW



UNIT : mm

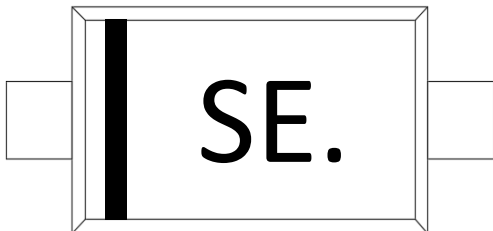
SUGGESTED SOLDER PAD LAYOUT



SIDE VIEW

DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	---	0.0393	---	1.0000
A1	0.0000	0.0039	0.0000	0.1000
A2	0.0314	0.0354	0.8000	0.9000
b	0.0098	0.0157	0.2500	0.4000
c	0.0031	0.0059	0.0800	0.1500
D	0.0472	0.0551	1.2000	1.4000
E	0.0629	0.0709	1.6000	1.8000
E1	0.0984	0.1063	2.5000	2.7000
L	0.0187TYP		0.475TYP	
L1	0.0098	0.0157	0.250	0.400
θ	0°	8°	0°	8°

## ■ Marking Information



### Note:

1. All marking is at middle of the product body
2. All marking is in laser marking
3. Body color: Black



## B0530WSQ

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### Disclaimer

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