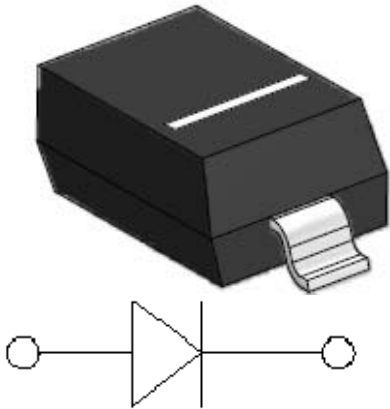


## Small Signal Schottky Diode



### Features

- $V_R$  100V
- $I_{FAV}$  150mA

### Mechanical Data

- **Package:** 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
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	mA	$t_p=8.3\text{ms}$	750
Average forward current	$I_{FAV}$	mA		150
Power dissipation	$P_D$	mW		200
Thermal Resistance From Junction To Ambient	$R_{thJA}$	$^\circ\text{C}/\text{W}$		625
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	VALUE
Maximum Forward voltage	$V_F$	V	$I_F=0.1\text{mA}$	0.25
		V	$I_F=10\text{mA}$	0.45
		V	$I_F=250\text{mA}$	1
Maximum Reverse current	$I_R$	$\mu\text{A}$	$V_R=1.5\text{V}$	0.3
		$\mu\text{A}$	$V_R=10\text{V}$	0.5
		$\mu\text{A}$	$V_R=50\text{V}$	1
		$\mu\text{A}$	$V_R=75\text{V}$	2
Minimum Breakdown voltage	$V_R$	V	$I_R=100\mu\text{A}$	100
Maximum 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



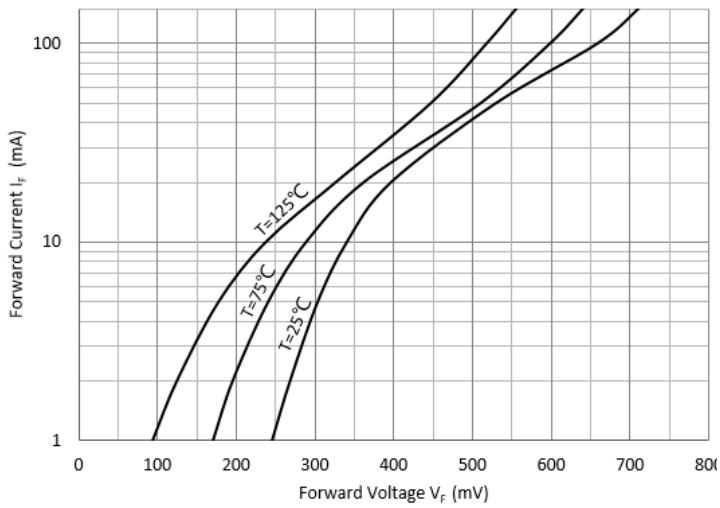
# BAT46WS

## Ordering Information (Example)

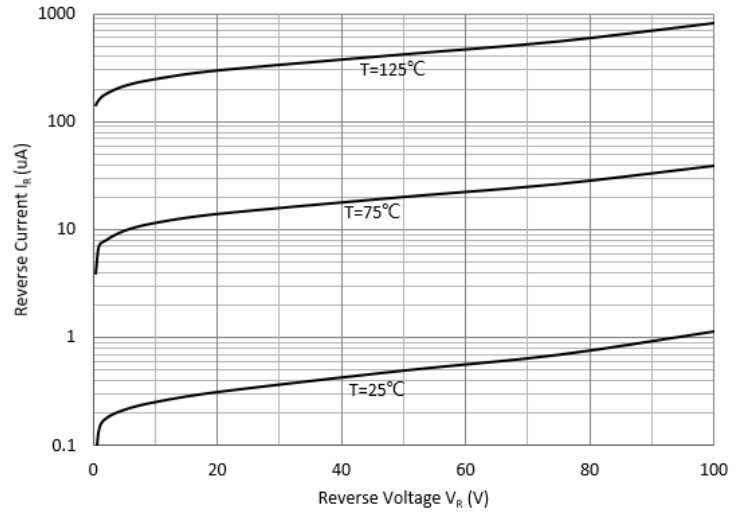
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT46WS	F2	Approximate 0.0048	3000	30000	120000	7" reel

## Characteristics (Typical)

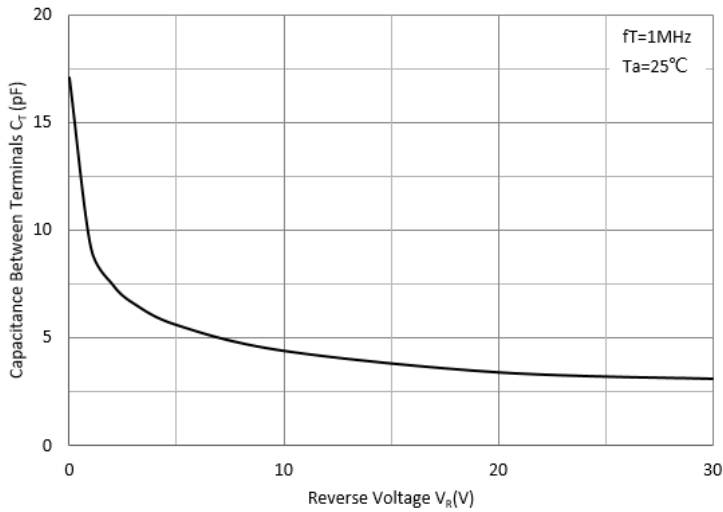
Forward Characteristics



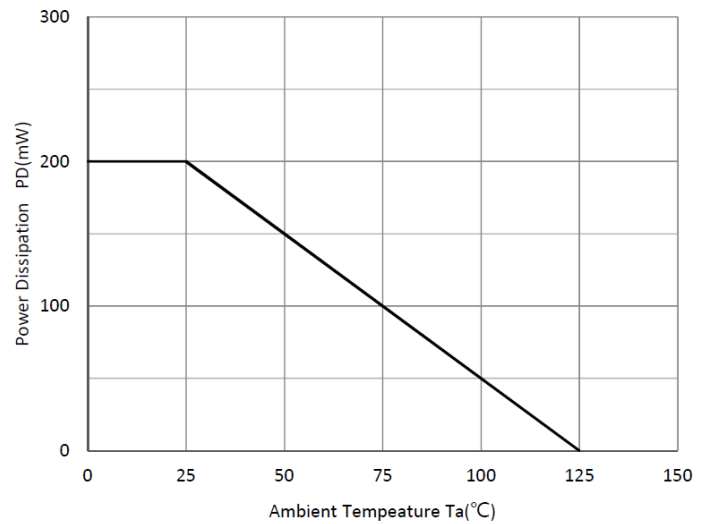
Reverse Characteristics



Capacitance Characteristics



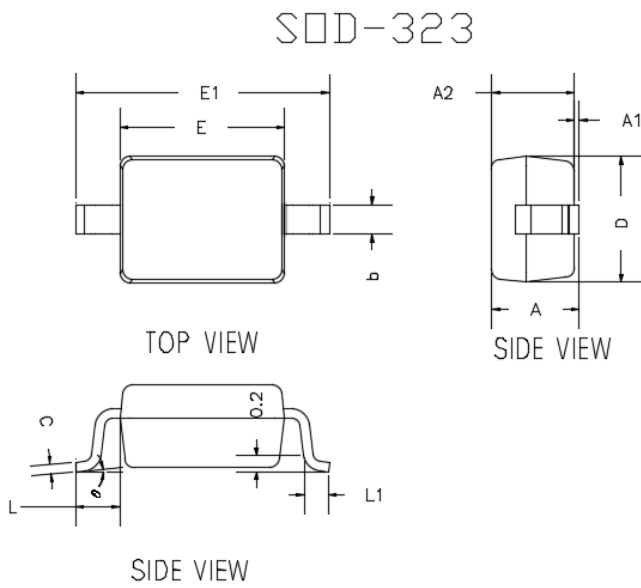
Power Derating Curve





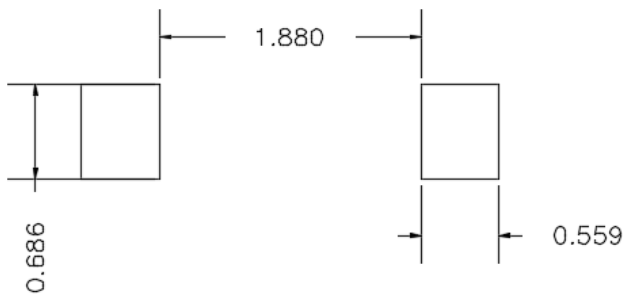
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## ■Outline Dimensions



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
e	0°	8°	0°	8°

## ■Soldering Footprint



UNIT : mm

SUGGESTED SOLDER PAD LAYOUT



## BAT46WS

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