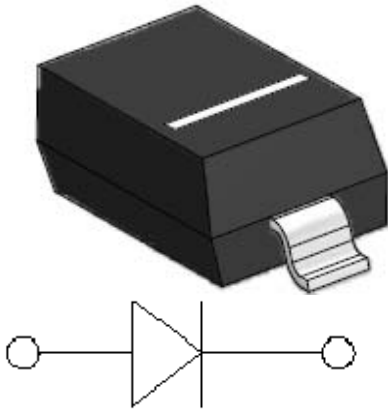


## Small Signal Schottky Diode



### Features

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

### Mechanical Data

- **Package:** SOD-123
- **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	$R_{\theta JA}$	$^\circ\text{C}/\text{W}$		500
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



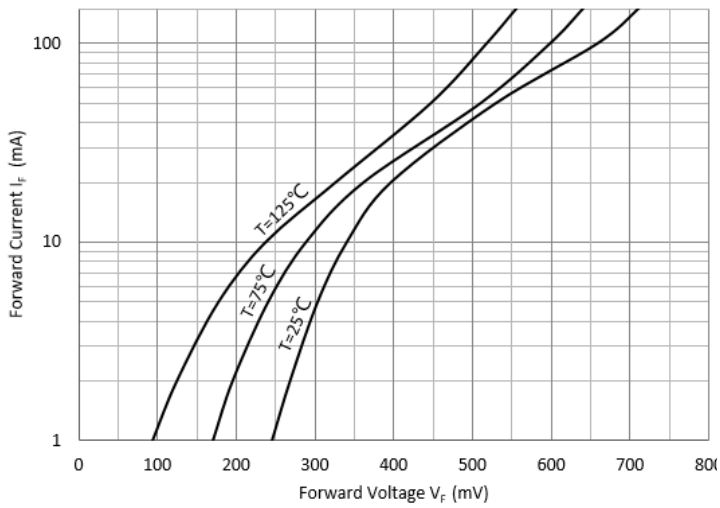
# BAT46W

## Ordering Information (Example)

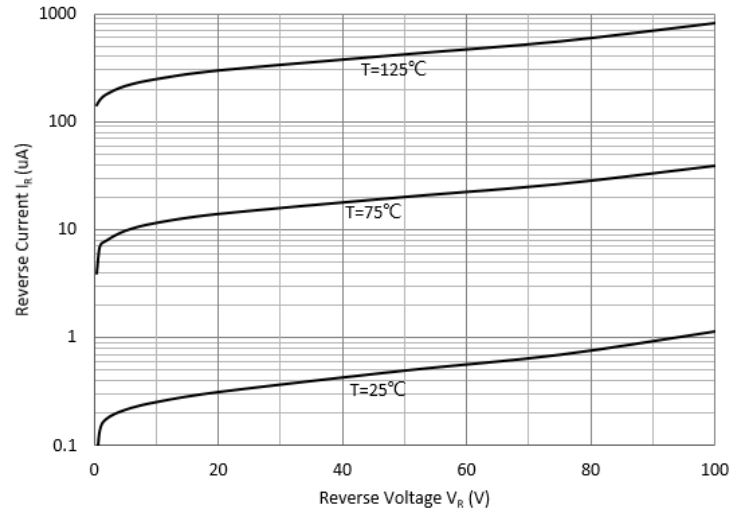
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT46W	F2	Approximate 0.009	3000	30000	120000	7" reel

## Characteristics (Typical)

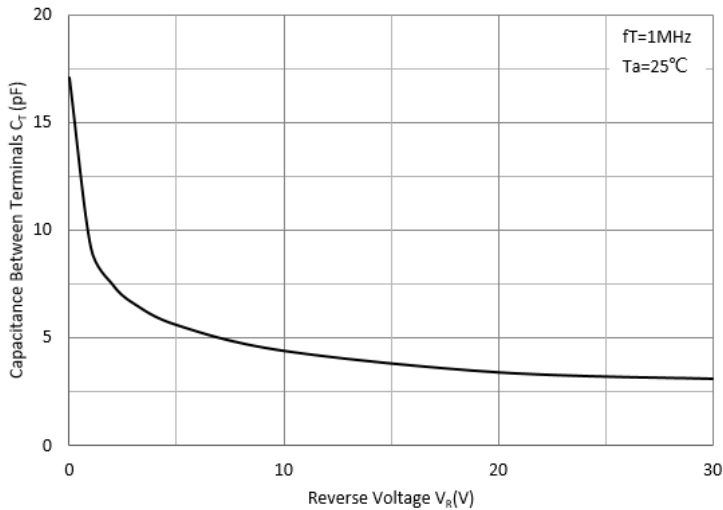
Forward Characteristics



Reverse Characteristics



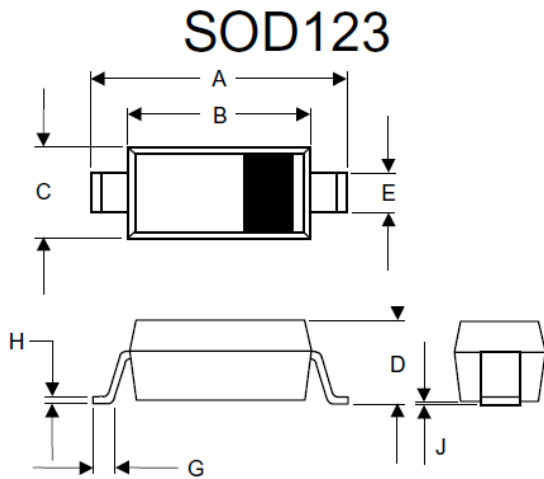
Capacitance Characteristics





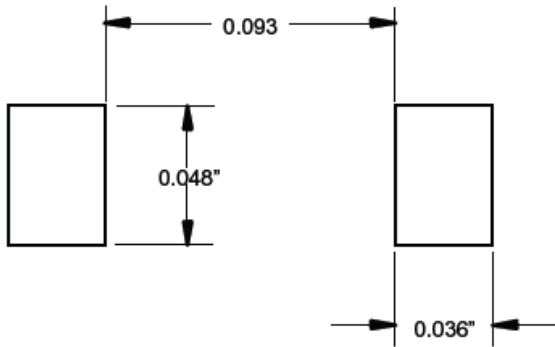
# BAT46W

## ■ SOD-123 Package Outline Dimensions



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	-----	.053	-----	1.35	
E	.012	.031	0.30	.78	
G	.006	-----	0.15	-----	
H	-----	.01	-----	.25	
J	-----	.006	-----	.15	

## ■ SOD-123 Soldering Footprint



Unit: inches



## BAT46W

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