



# BAT46W

**200mW**  
**Schottky Diode**  
**100 Volts**

## Features

- High breakdown Voltage
- Low turn-on voltage
- Guard ring construction for transient protection
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

## Mechanical Data

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: S9/L6

## Maximum Ratings

Symbol	Rating	Rating	Unit
V <sub>RRM</sub>	Repetitive Peak Reverse Voltage	100	V
I <sub>F</sub>	Forward DC Current	150	mA
I <sub>o</sub>	Average Rectified Output Current at	75	mA
P <sub>D</sub>	Power Dissipation	200	mW
R <sub>JA</sub>	Thermal Resistance Junction to Ambient Air <sup>(1)</sup>	500	°C/W
T <sub>J</sub>	Junction Temperature	-55 to +125	°C
T <sub>STG</sub>	Storage Temperature	-55 to +150	°C

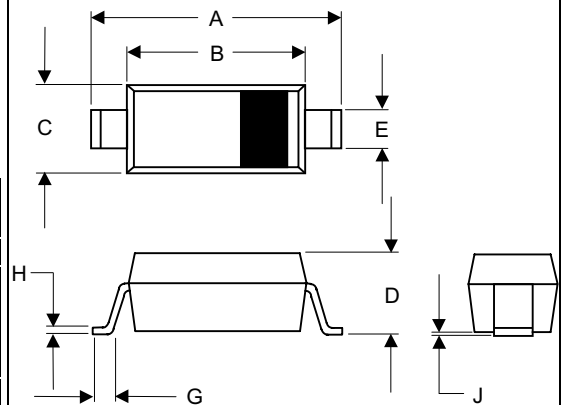
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
V <sub>(BR)R</sub>	Reverse Breakdown Voltage (I <sub>R</sub> =100uAdc)	100	---	---	V
V <sub>F</sub>	Forward Voltage I <sub>F</sub> =0.1mAdc I <sub>F</sub> =10mAdc I <sub>F</sub> =250mAdc	---	---	0.25 0.45 1	V
I <sub>R</sub>	Leakage Current (V <sub>R</sub> =10Vdc) (V <sub>R</sub> =50Vdc) (V <sub>R</sub> =75Vdc)	---	---	0.8 2 5	uA
C <sub>T</sub>	Total Capacitance (V <sub>R</sub> =0, f=1.0MHz) (V <sub>R</sub> =1.0, f=1.0MHz)	---	10.0 6.0	---	pF pF

Notes:

1. Valid provided that electrodes are kept at ambient temperature

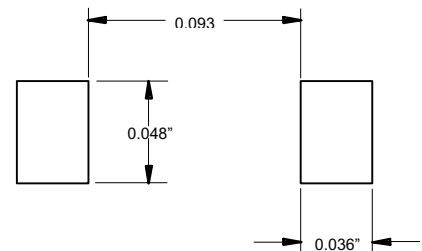
## SOD123



### 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	0.78	
G	.006	-----	0.15	-----	
H	-----	.01	-----	0.25	
J	-----	.006	-----	0.15	

### SUGGESTED SOLDER PAD LAYOUT



# BAT46W

## Typical Characteristics

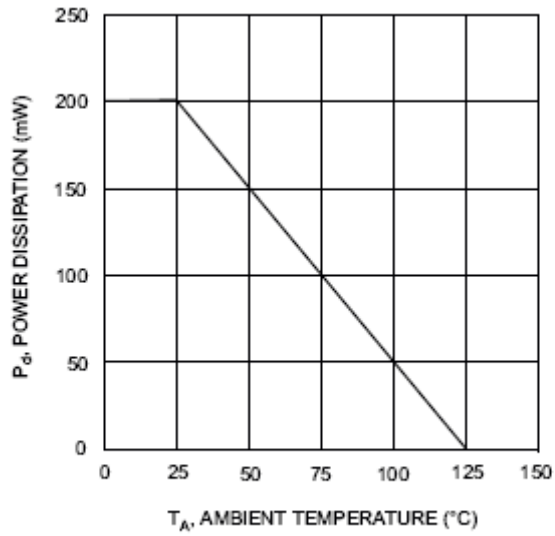


Fig.1 Power Derating Curve



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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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