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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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# BAT42W THRU BAT43W

**200mW  
Schottky Diodes  
30 Volts**

## Features

- Halogen free available upon request by adding suffix "-HF"
- For General Purpose applications
- These diodes are also available in the DO-35 case with the type designations BAT42 to BAT43 and in the MiniMELF case with the type designations LL42 to LL43.
- Lead Free Finish/RoHS Compliant("P" Suffix designates RoHS Compliant. See ordering information)

## Mechanical Data

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking code: BAT42W=S7 ,L2  
BAT43W=S8 ,L3

## Maximum Ratings

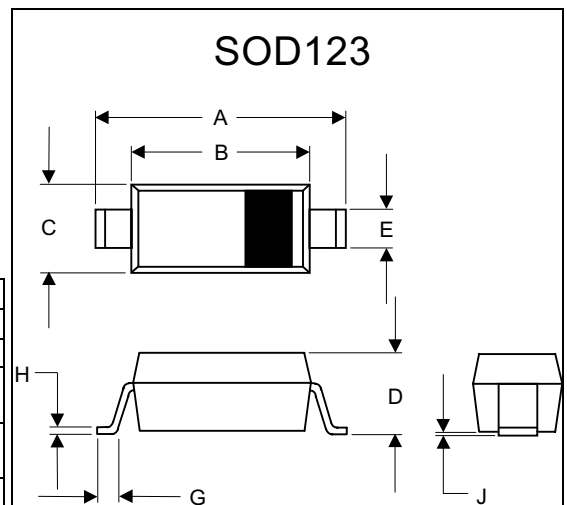
Symbol	Rating	Rating	Unit
V <sub>RRM</sub>	Repetitive Peak Reverse Voltage	30	V
I <sub>F</sub>	Forward DC Current at Tamb=25°C	200	mA
I <sub>FRM</sub>	Repetitive Peak Forward Current at tp<1s, Tamb=25°C <sup>(1)</sup>	500	mA
I <sub>FSM</sub>	Surge Forward Current at tp<10ms, Tj=25°C <sup>(1)</sup>	4.0	A
P <sub>tot</sub>	Power Dissipation at Tamb=65°C <sup>(1)</sup>	200	mW
R <sub>JA</sub>	Thermal Resistance Junction to Ambient Air <sup>(1)</sup>	300	°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 Pulsed)	30	---	---	V
V <sub>F</sub>	Forward Voltage <sup>(2)</sup> I <sub>F</sub> =200mAdc	---	---	1.0	V
	I <sub>F</sub> =10mAdc	---	---	0.4	
	I <sub>F</sub> =50mAdc	---	---	0.65	
	I <sub>F</sub> =2.0mAdc	0.26	---	0.33	
I <sub>R</sub>	Leakage Current <sup>(2)</sup> (V <sub>R</sub> =25Vdc) (V <sub>R</sub> =25Vdc, T <sub>J</sub> =100°C)	---	---	0.5	uA
		---	---	100	
C <sub>tot</sub>	Capacitance (V <sub>R</sub> =1.0, f=1.0MHz)	---	7.0	---	pF
t <sub>rr</sub>	Reverse Recovery Time (I <sub>F</sub> =10mA, I <sub>R</sub> =10mA) (I <sub>rr</sub> =1.0mA, R <sub>f</sub> =100OHM)	---	---	5.0	ns

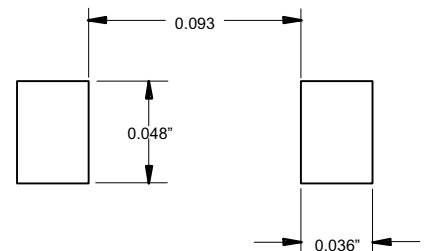
Notes:

1. Valid provided that electrodes are kept at ambient temperature
2. Pulse Test tp<300us, Duty Cycle<2%



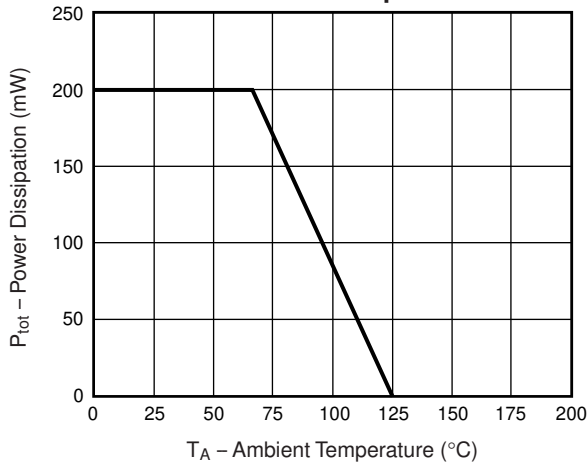
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	-----	.053	-----	1.35	
E	.012	.031	0.30	.78	
G	.006	-----	0.15	-----	
H	-----	.01	-----	.25	
J	-----	.006	-----	.15	

### SUGGESTED SOLDER PAD LAYOUT

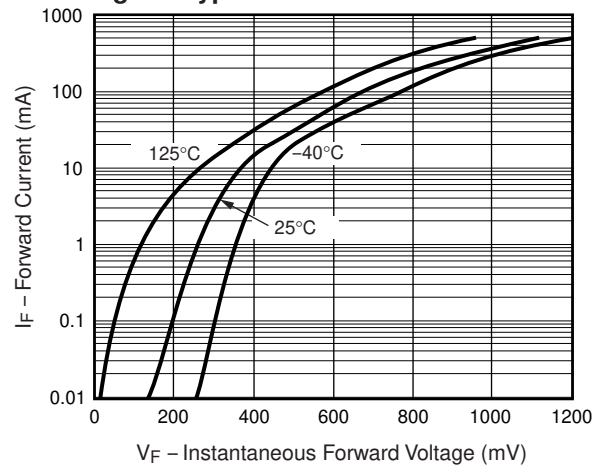


# BAT42W thru BAT43W

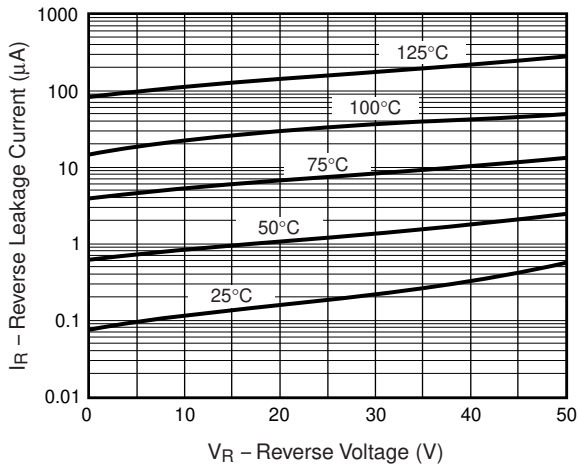
**Fig. 1 – Admissible Power Dissipation vs. Ambient Temperature**



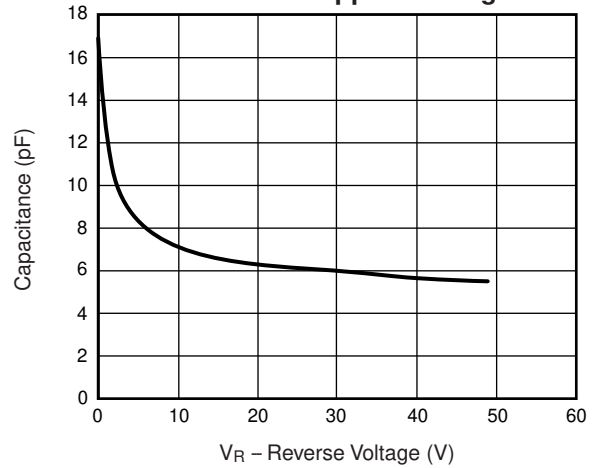
**Fig. 2 – Typical Reverse Characteristics**



**Fig. 3 – Typical Reverse Characteristics**



**Fig. 4 – Typical Capacitance vs. Reverse Applied Voltage**







Micro Commercial Components

### 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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