

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

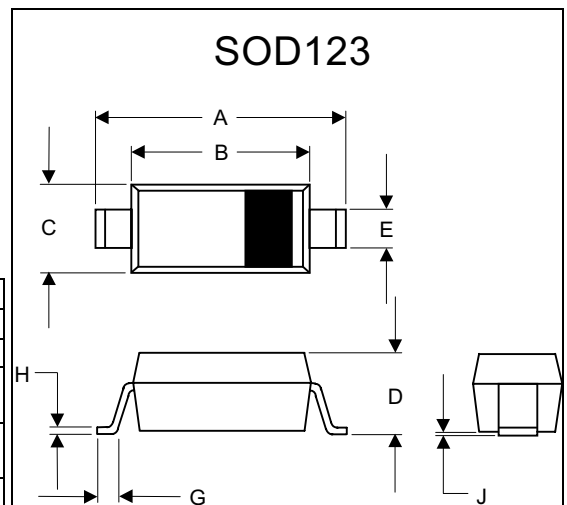
Symbol	Rating	Rating	Unit
V _{RRM}	Repetitive Peak Reverse Voltage	30	V
I _F	Forward DC Current at Tamb=25°C	200	mA
I _{FRM}	Repetitive Peak Forward Current at tp<1s, Tamb=25°C ⁽¹⁾	500	mA
I _{FSM}	Surge Forward Current at tp<10ms, Tj=25°C ⁽¹⁾	4.0	A
P _{tot}	Power Dissipation at Tamb=65°C ⁽¹⁾	200	mW
R _{JA}	Thermal Resistance Junction to Ambient Air ⁽¹⁾	300	°C/W
T _J	Junction Temperature	-55 to +125	°C
T _{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
V _{(BR)R}	Reverse Breakdown Voltage (I _R =100uAdc Pulsed)	30	---	---	V
V _F	Forward Voltage ⁽²⁾ I _F =200mAdc	---	---	1.0	V
	I _F =10mAdc	---	---	0.4	
	I _F =50mAdc	---	---	0.65	
	I _F =2.0mAdc	0.26	---	0.33	
I _R	Leakage Current ⁽²⁾ (V _R =25Vdc) (V _R =25Vdc, T _J =100°C)	---	---	0.5	uA
		---	---	100	
C _{tot}	Capacitance (V _R =1.0, f=1.0MHz)	---	7.0	---	pF
t _{rr}	Reverse Recovery Time (I _F =10mA, I _R =10mA) (I _{rr} =1.0mA, R _f =100OHM)	---	---	5.0	ns

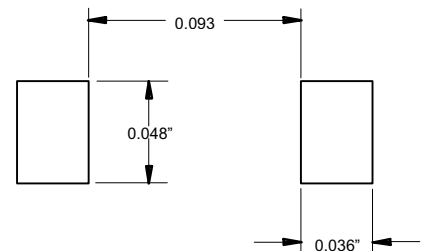
Notes:

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

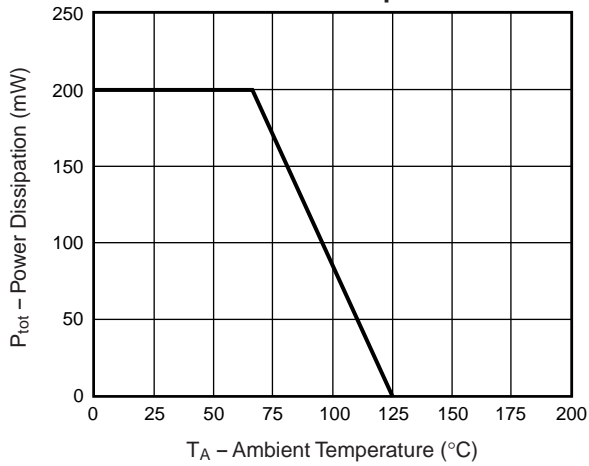


Fig. 2 – Typical Reverse Characteristics

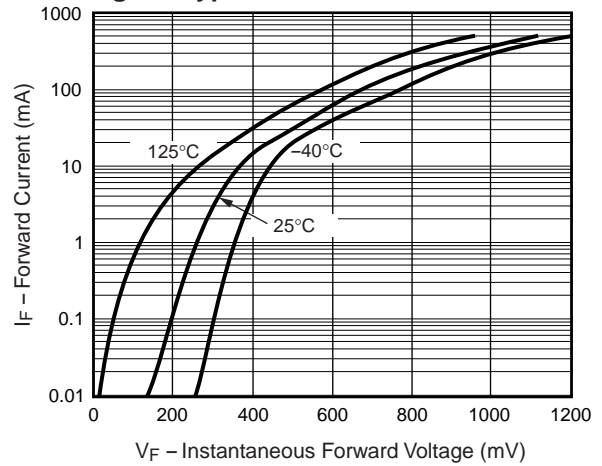


Fig. 3 – Typical Reverse Characteristics

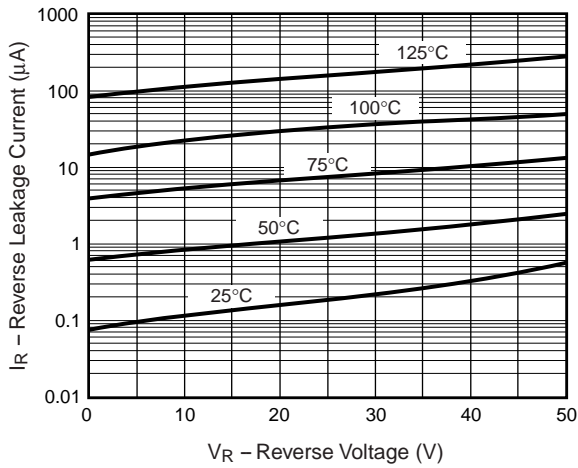
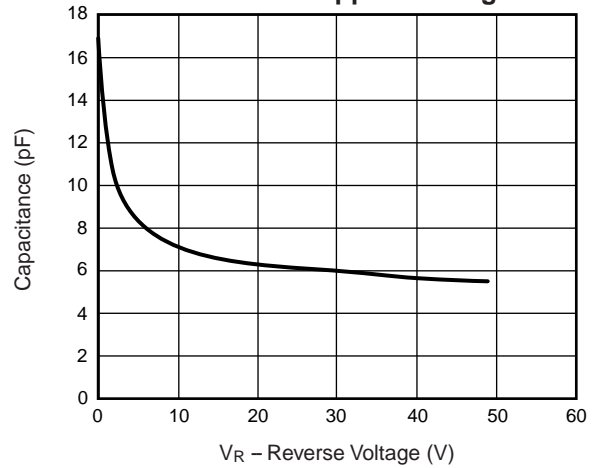


Fig. 4 – Typical Capacitance vs. Reverse Applied Voltage





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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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