

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

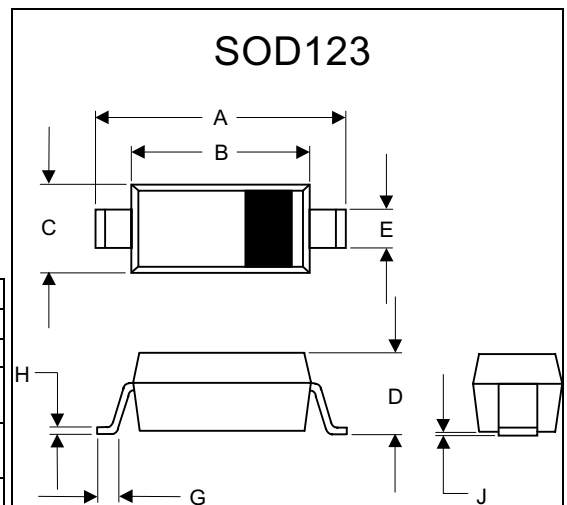
Symbol	Rating	Rating	Unit
V _{RRM}	Repetitive Peak Reverse Voltage	30	V
I _F	Forward DC Current at Tamb=25°C	200	mA
I _{FRM}	Repetitive Peak Forward Current at tp<1s, Tamb=25°C ⁽¹⁾	500	mA
I _{FSM}	Surge Forward Current at tp<10ms, Tj=25°C ⁽¹⁾	4.0	A
P _{tot}	Power Dissipation at Tamb=65°C ⁽¹⁾	200	mW
R _{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 =100µAdc 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	µA
		---	---	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

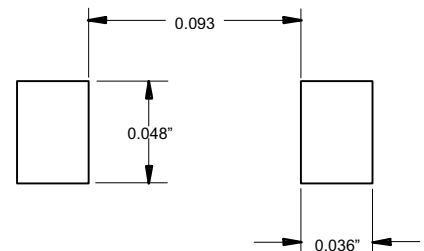
Notes:

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

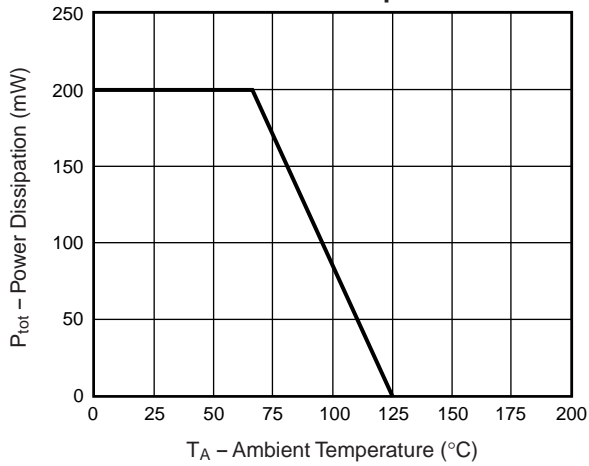


Fig. 2 – Typical Reverse Characteristics

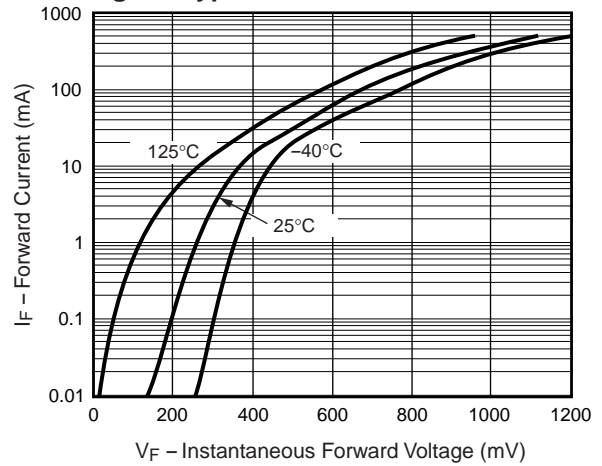


Fig. 3 – Typical Reverse Characteristics

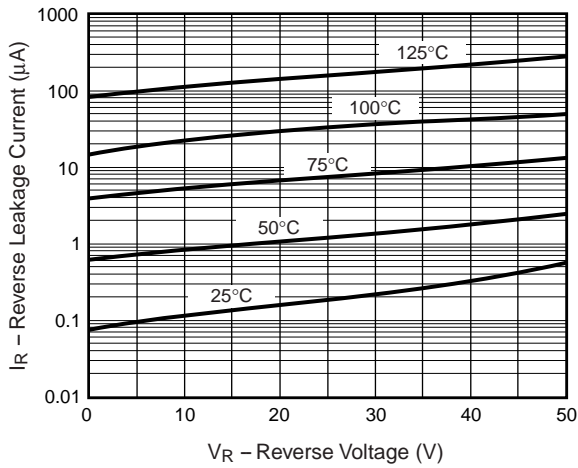
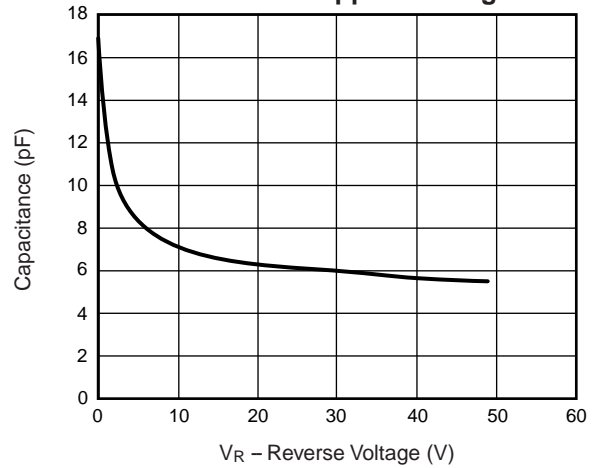


Fig. 4 – Typical Capacitance vs. Reverse Applied Voltage





TM

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

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

www.mccsemi.com