BAT42W THRU BAT43W

200mW Schottky Diodes 30 Volts

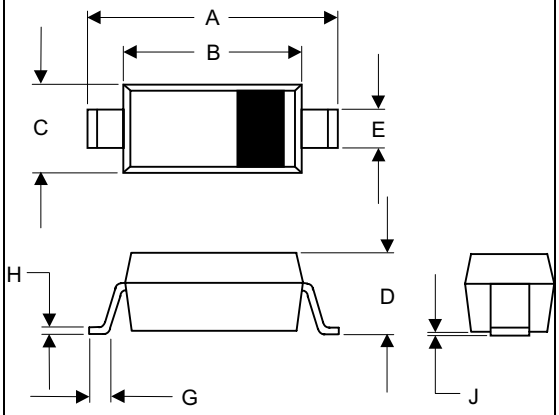
Features

- 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

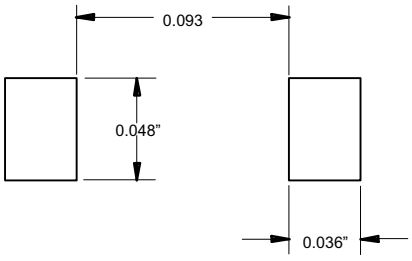
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Marking code: BAT42W=S7 ,L2
  BAT43W=S8 ,L3

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	.78	
G	.006	-----	0.15	-----	
H	-----	.01	-----	.25	
J	-----	.006	-----	.15	

SUGGESTED SOLDER PAD LAYOUT



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)					V
	I_F=200mAdc		---	---	1.0	
	I_F=10mAdc	BAT42W	---	---	0.4	
	I_F=50mAdc	BAT42W	---	---	0.65	
	I_F=2.0mAdc	BAT43W	0.26	---	0.33	
	I_F=15mAdc	BAT43W	---	---	0.45	
I_R	Leakage Current (2)					uA
	(V_R=25Vdc)		---	---	0.5	
	(V_R=25Vdc, Tj=100°C)		---	---	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) (Irr=1.0mA, R_L=100OHM)		---	---	5.0	ns

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

BAT42W thru BAT43W

Fig. 1 – Admissible Power Dissipation vs. Ambient Temperature

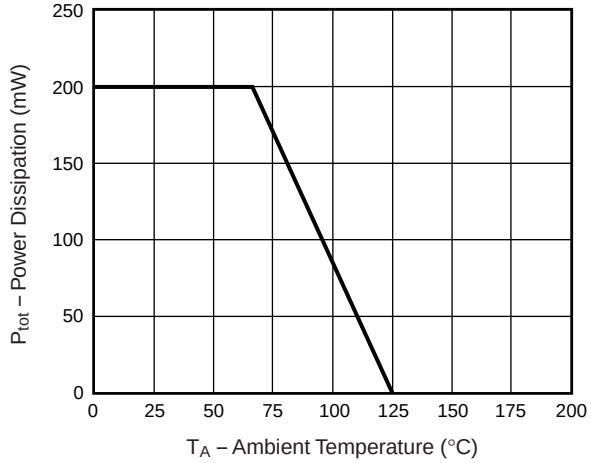


Fig. 2 – Typical Reverse Characteristics

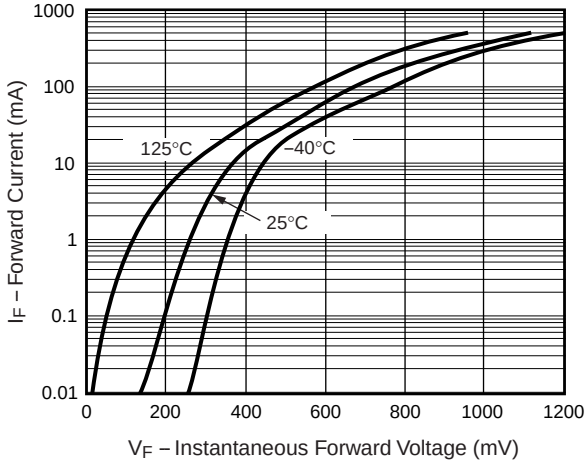


Fig. 3 – Typical Reverse Characteristics

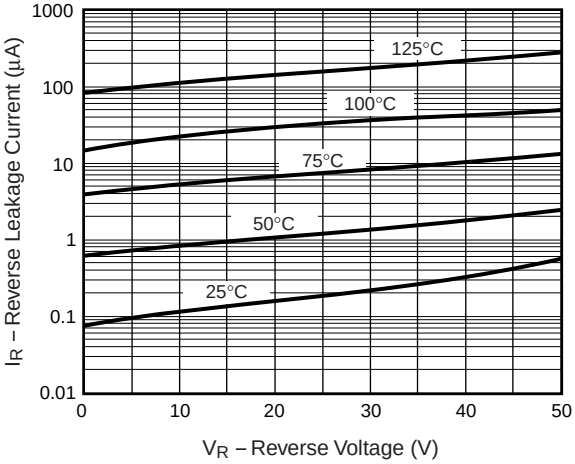
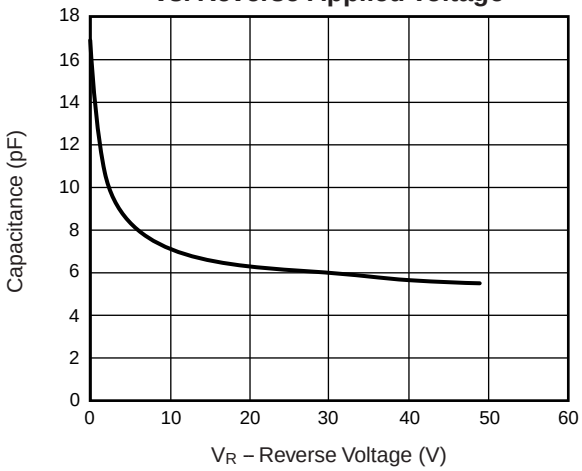


Fig. 4 – Typical Capacitance vs. Reverse Applied Voltage



Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel

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