Micro Commercial Components

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BAT42WS
BAT43WS

Schottky Barrier Diode 200mW

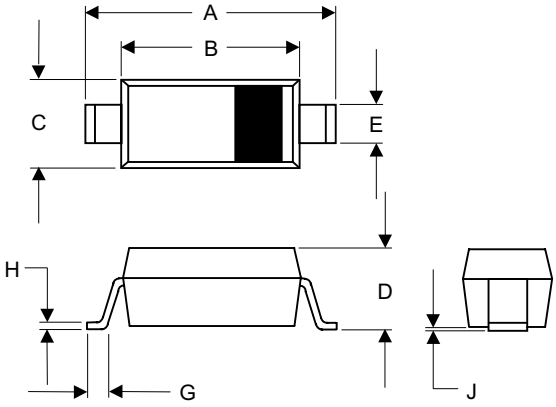
Features

- Halogen free available upon request by adding suffix "-HF"
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- Low Forward Voltage Drop.

Mechanical Data

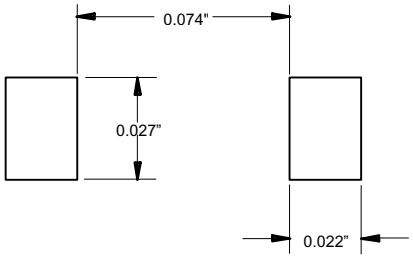
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Polarity: Indicated by Cathode Band
- Marking: BAT42WS S7
  BAT43WS S8
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

SOD323



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	-----	.006	-----	0.15	

SUGGESTED SOLDER PAD LAYOUT



Maximum Ratings @ 25°C Unless Otherwise Specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Forward Continuous Current(Note1)	I_{FM}	200	mA
Average Rectified Output Current	Io	100	mA
Repetitive Peak Forward Surge Current @ t<1.0s	I_{FRM}	500	mA
Non-Rep. Peak Forward Surge Current @ t<10ms	I_{FSM}	4	A
Power Dissipation	P_d	200	mW
Thermal Resistance(Note 1)	R	625	K/W
Operation/Storage Temp. Range	Tj, T_{STG}	-55 to +125	°C

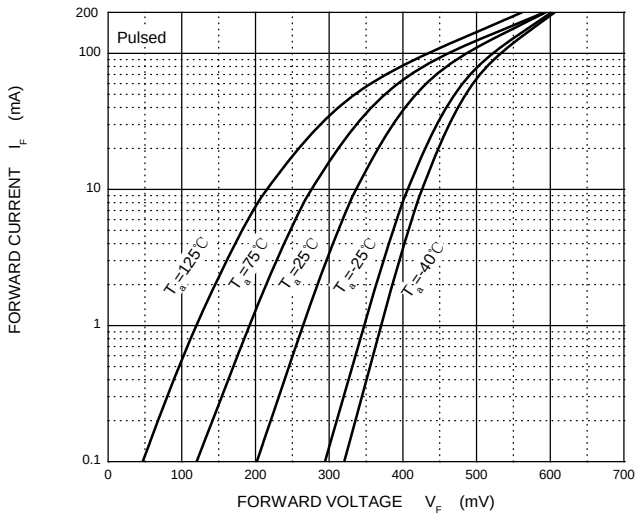
Electrical Characteristics @ 25°C Unless Otherwise Specified

Charateristic	Symbol	Min	Max	Unit	Test Cond.
Forward Voltage Drop(Note2) All Types BAT42WS BAT42WS BAT43WS BAT43WS	V_{FM}	 ---- ---- ---- 0.26 ----	 1.0 0.40 0.65 0.33 0.45	V	 I_F=200mA I_F=10mA I_F=50mA I_F=2.0mA I_F=15mA
Maximum Peak Reverse Current	I_{RM}	-----	500 100	nA uA	V_R=25V V_R=25V Tj=100°C
Junction Capacitance	C_j	-----	10	pF	V_R=1V, f=1.0MHz
Reverse Recovery Time	t_{rr}	-----	5	ns	I_F=I_R=10mA I_{rr}=0.1I_R R_L=100OHMS

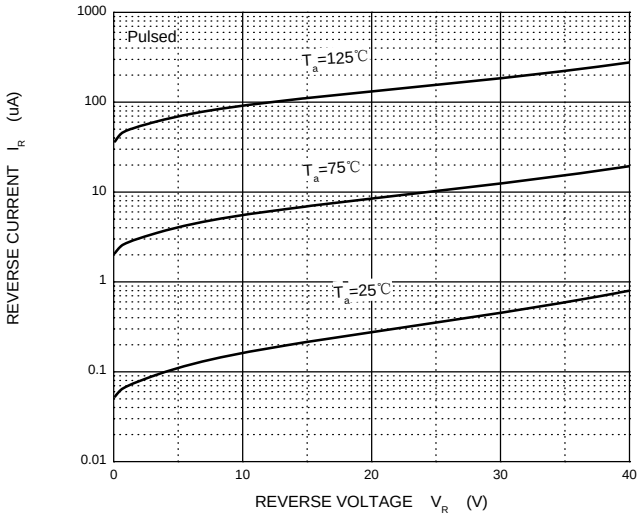
Notes: 1. Valid provided that terminals are kept at ambient temperature
2. t<=300us, duty cycle<=2%

RATINGS AND CHARACTERISTIC CURVES

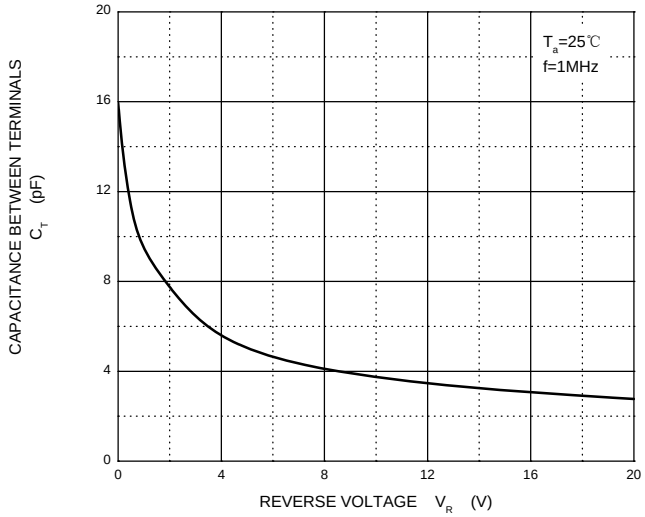
Forward Characteristics



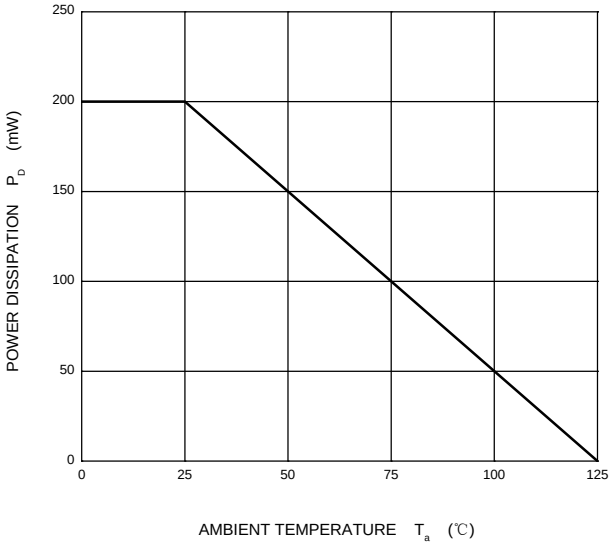
Reverse Characteristics



Capacitance Characteristics



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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