

## Features

- Integrated Diffused Guard Ring
- Low Forward Voltage
- For Low-Loss, Fast-Recovery, Meter Protection, Bias Isolation and Clamping Applications
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

## Maximum Ratings

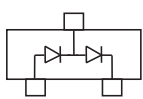
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 500°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum DC Blocking Voltage
BAT64-04	64S	40V	40V
BAT64-05	65S	40V	40V
BAT64-06	66S	40V	40V

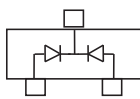
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	250mA	
Peak Forward Surge Current	$I_{FSM}$	800mA	
Power Dissipation	$P_d$	250mW	$T_A = 25^\circ\text{C}$
Maximum Forward Voltage	$V_F$	350mV 430mV 520mV 750mV	$I_F = 1.0\text{mA}$ $I_F = 10\text{mA}$ $I_F = 30\text{mA}$ $I_F = 100\text{mA}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	2 $\mu\text{A}$	$V_R = 25\text{V}$
Typical Junction Capacitance	$C_T$	6.0pF	Measured at 1.0MHz, $V_R = 5.0\text{V}$

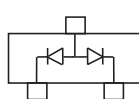
## Internal Structure:



BAT64-04



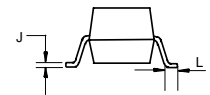
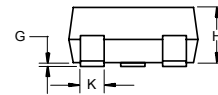
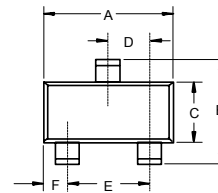
BAT64-05



BAT64-06

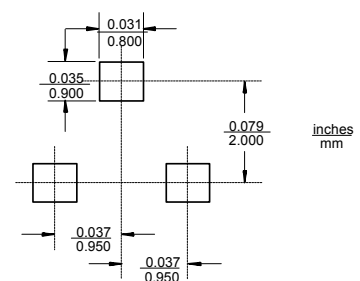
# 250mW, 40V Small Signal Schottky Diode

## SOT-23



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.110	0.120	2.80	3.04	
B	0.083	0.104	2.10	2.64	
C	0.047	0.055	1.20	1.40	
D	0.034	0.041	0.85	1.05	
E	0.067	0.083	1.70	2.10	
F	0.018	0.024	0.45	0.60	
G	0.0004	0.006	0.01	0.15	
H	0.035	0.043	0.90	1.10	
J	0.003	0.007	0.08	0.18	
K	0.012	0.020	0.30	0.51	
L	0.007	0.020	0.20	0.50	

## Suggested Solder Pad Layout



## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

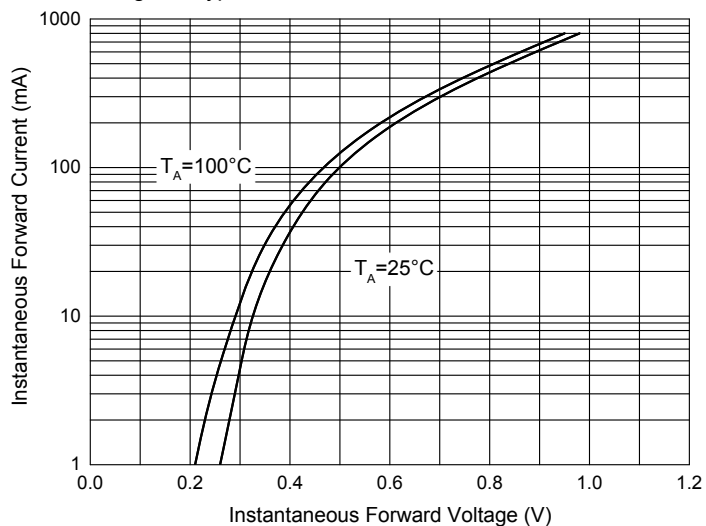


Fig. 2 - Typical Reverse Leakage Characteristics

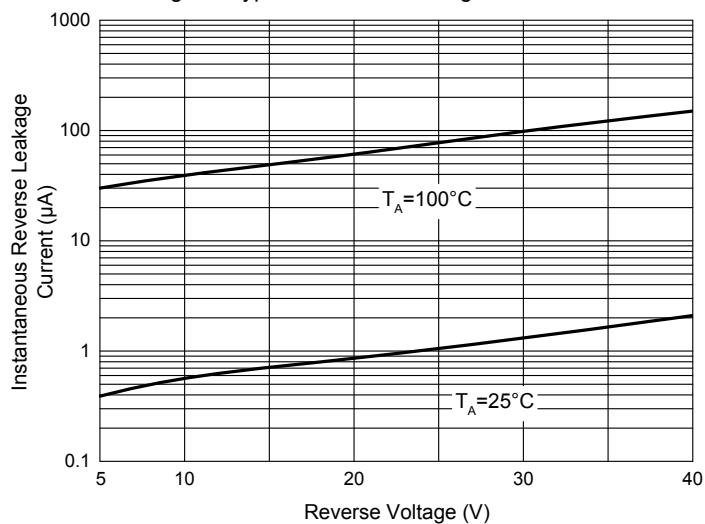
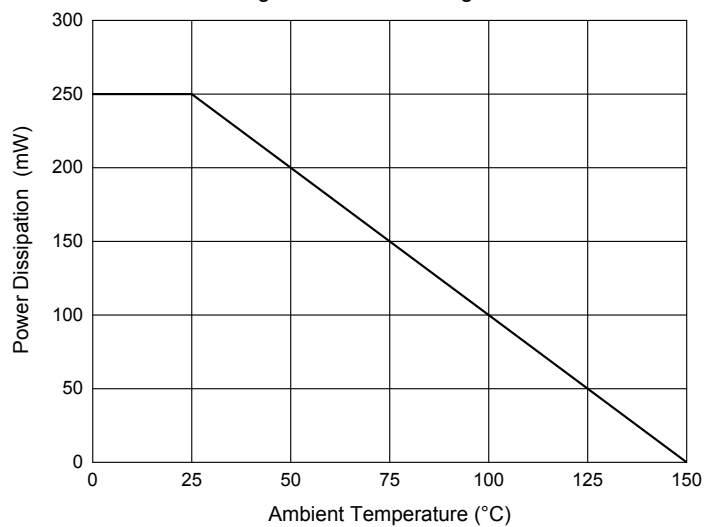


Fig. 3 - Power Derating Curve



## 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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