

Features

- Low Forward Voltage
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/Rohs Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

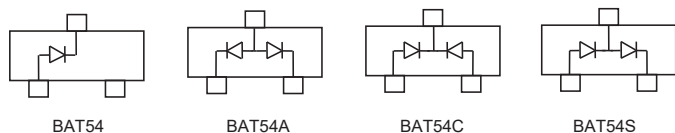
- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 400°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum DC Blocking Voltage
BAT54	KL1	30V	30V
BAT54A	KL2	30V	30V
BAT54C	KL3	30V	30V
BAT54S	KL4	30V	30V

Electrical Characteristics @ 25°C Unless Otherwise Specified

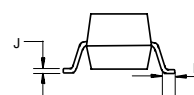
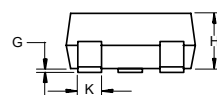
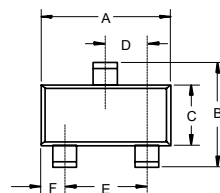
Average Forward Current	$I_{F(AV)}$	200mA	
Peak Forward Surge Current	I_{FSM}	600mA	$t < 1s$
Power Dissipation	P_d	250mW	$T_A = 25^\circ C$
Maximum Forward Voltage	V_F	240mV 320mV 400mV 500mV 800mV	$I_F = 0.1mA$ $I_F = 1.0mA$ $I_F = 10mA$ $I_F = 30mA$ $I_F = 100mA$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	2µA	$V_R = 25V$
Maximum Junction Capacitance	C_J	10.0pF	Measured at 1.0MHz, $V_R = 1.0V$
Maximum Reverse Recovery Time	t_{rr}	5.0ns	$I_F = I_R = 10mA$; $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.



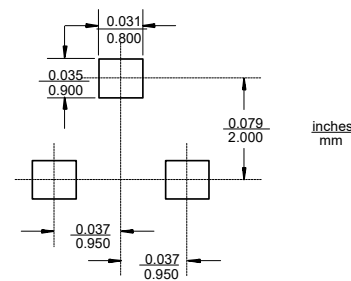
**250mW, 30V
Schottky Barrier
Diode**

SOT-23



DIM	INCHES		MM		NOTE
	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 - Forward Characteristics

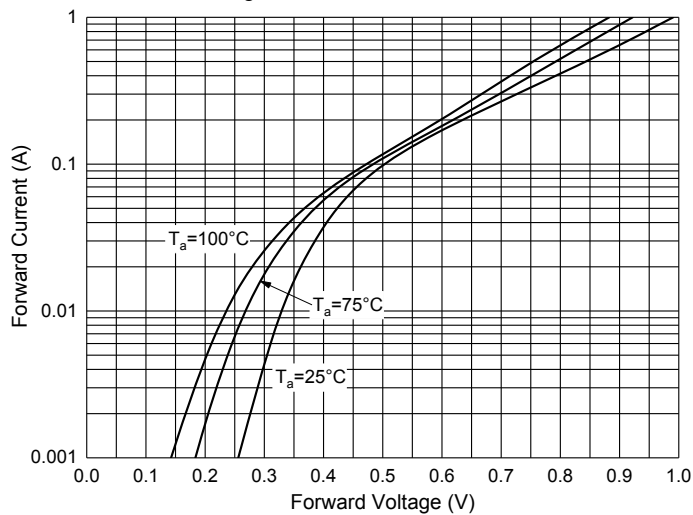


Fig. 2 - Reverse Characteristics

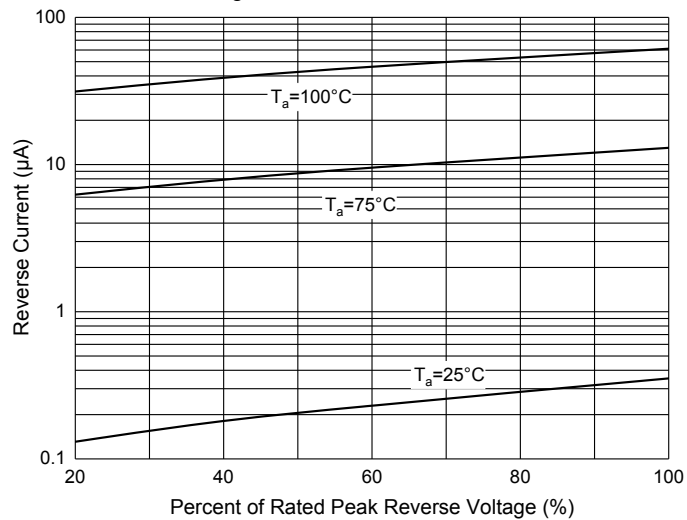
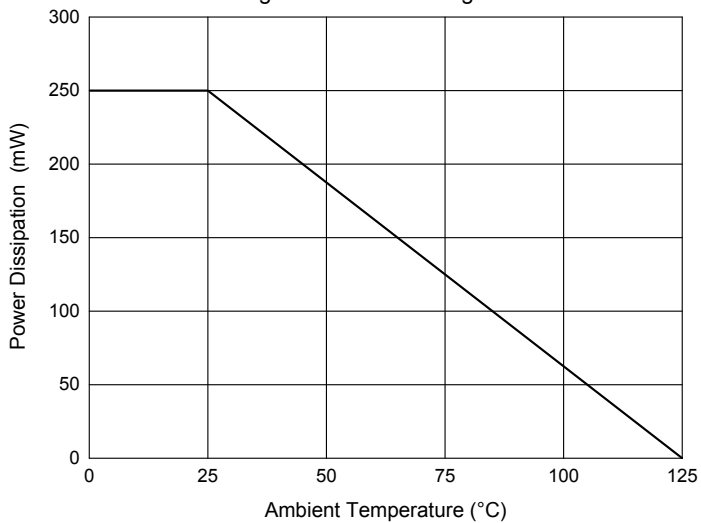


Fig. 3 - Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel
Part Number-13P	Tape&Reel: 10Kpcs/Reel

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