

**Features**

- Halogen Free. "Green" Device (Note 1)
- AEC-Q101 Qualified
- Low Forward Voltage
- Epoxy Meets UL 94 V-0 Flammability Rating
- 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 +125°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 500°C/W Junction to Ambient

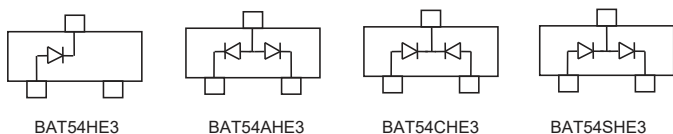
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum Working Peak Reverse Voltage	Maximum DC Blocking Voltage
BAT54HE3	KL1	30V	30V	30V
BAT54AHE3	KL2	30V	30V	30V
BAT54CHE3	KL3	30V	30V	30V
BAT54SHE3	KL4	30V	30V	30V

**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 Instantaneous 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, $V_R = 1.0V$
Reverse Recovery Time	$T_{rr}$	5.0ns	$I_F = I_R = 10mA$ ; $I_{(REC)} = 1mA$

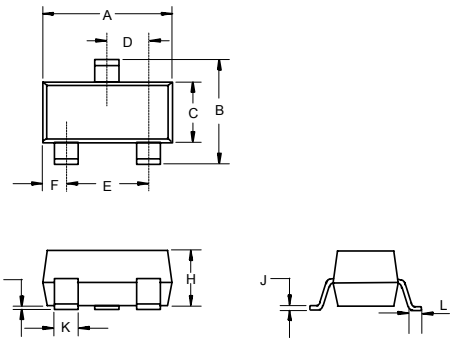
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

**Internal Structure**



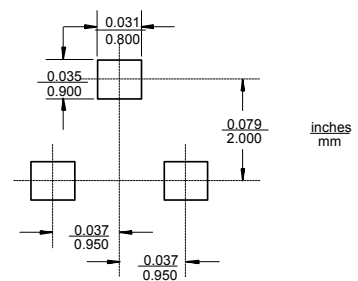
**250mW 30V  
Schottky Barrier  
Diode**

**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	0.014	0.020	0.35	0.51	
L	0.007	0.020	0.20	0.50	

**Suggested Solder Pad Layout**



**Curve Characteristics**

Fig. 1 - Power Derating Curve

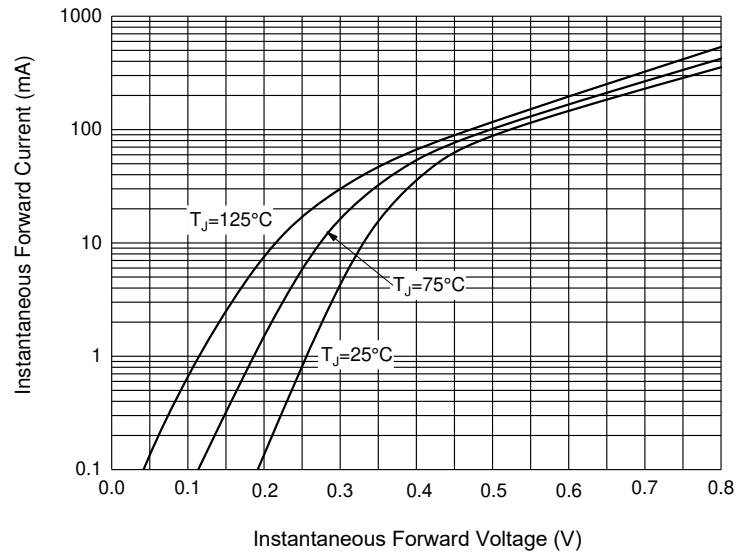
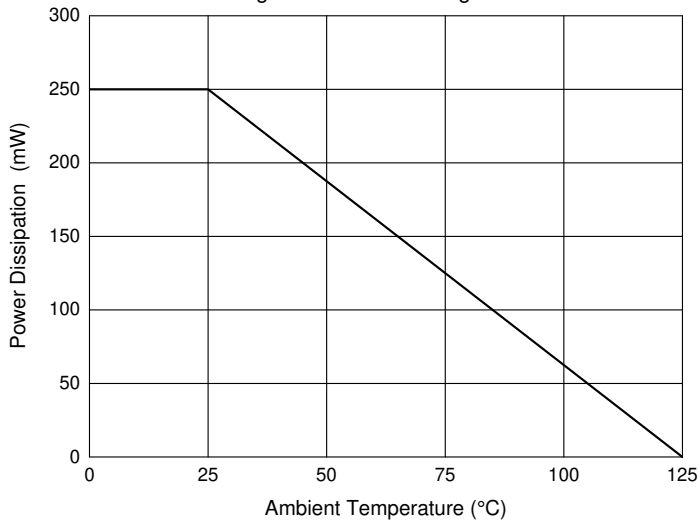
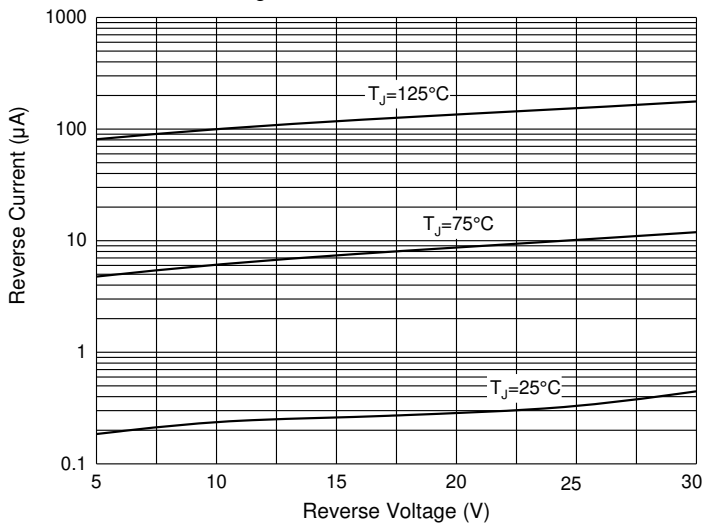


Fig. 3 - Reverse Characteristics



## Ordering Information

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

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