

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

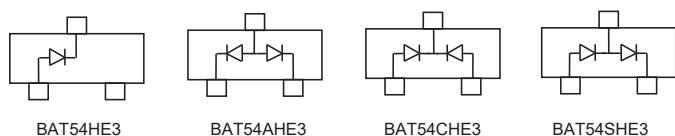
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum Working Peak Reverse Voltage	Maximum DC Blocking Voltage
BAT54HE3	KL1	30V	30V	30V
BAT54AHE3	KL2	30V	30V	30V
BAT54CHE3	KL3	30V	30V	30V
BAT54SHE3	KL4	30V	30V	30V

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	$I_F = I_R = 10mA$; $I_{(REC)} = 1mA$

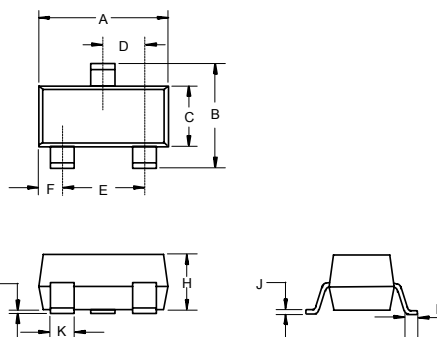
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



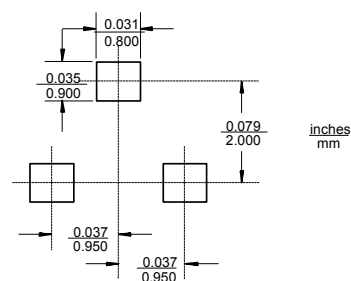
250mW 30V Schottky Barrier Diode

SOT-23



DIM	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	0.014	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

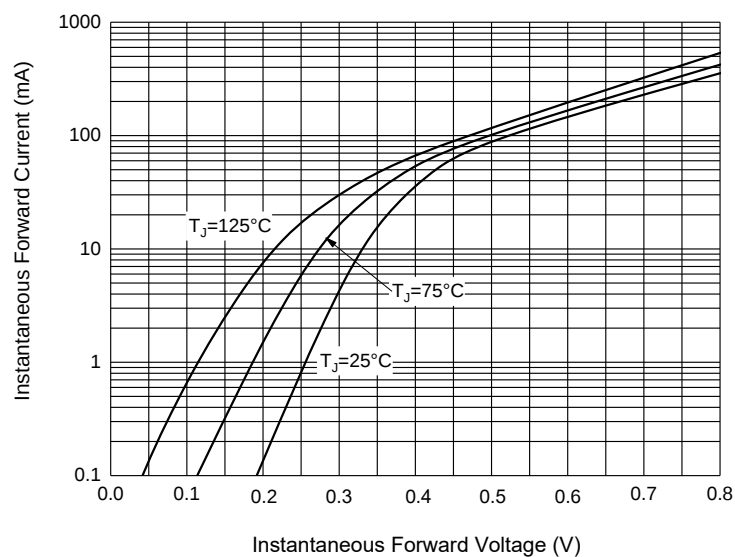
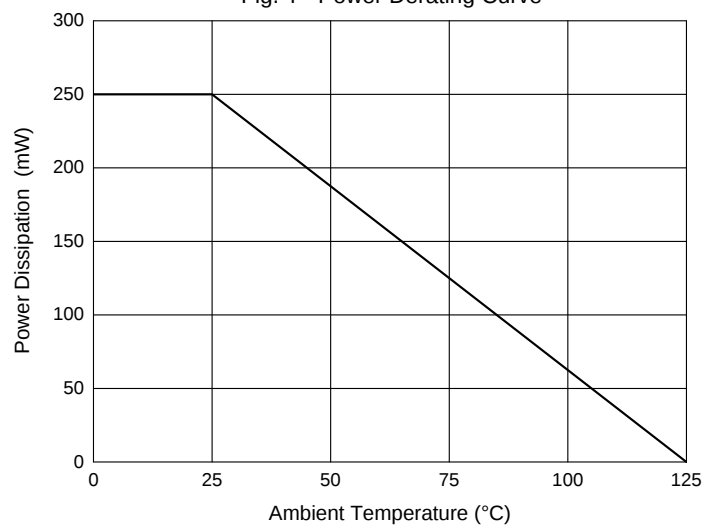
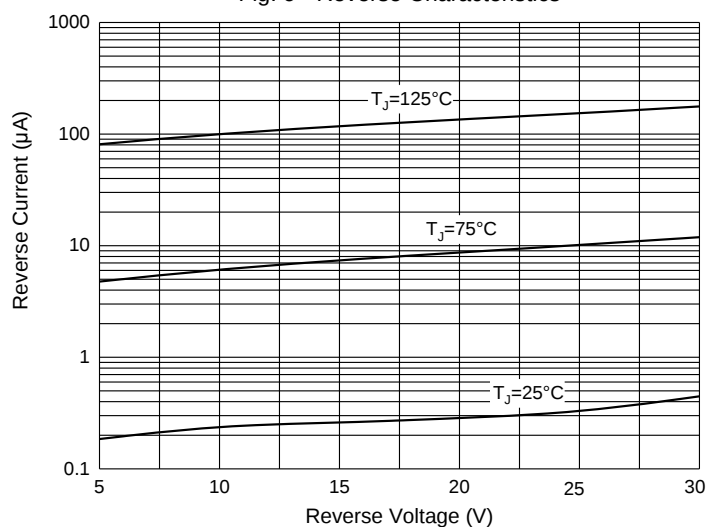


Fig. 3 - Reverse Characteristics



Ordering Information

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

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