

Features

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

Maximum Ratings

- Operating Junction Temperature Range: -55°C to 125°C
- Storage Temperature Range: -55°C to 150°C
- Typical Thermal Resistance: 286°C/W Junction to Ambient

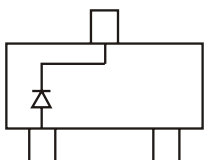
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
BAT750	K77	40V	28V	40V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	750mA			
Non-Repetitive Peak Forward Surge Current	I_{FSM}	5.5A			$t < 1s$
Power Dissipation	P_d	350mW			$T_A = 25^\circ C$
Forward Voltage	V_F	Min	Typ	Max	$I_F = 50mA$ $I_F = 100mA$ $I_F = 250mA$ $I_F = 500mA$ $I_F = 750mA$ $I_F = 1000mA$ $I_F = 1500mA$
		0.30V	0.34V		
		0.32V	0.36V		
		0.36V	0.39V		
		0.41V	0.44V		
		0.45V	0.49V		
		0.48V	0.54V		
0.55V	0.65V				
Reverse Current	I_R	60µA	100µA	$V_R = 30V$	
Reverse Breakdown	$V_{(BR)R}$	40V	45V	$I_R = 300µA$	
Junction Capacitance	C_J	175pF	25pF	$f = 1.0MHz, V_R = 0V$ $f = 1.0MHz, V_R = 25V$	

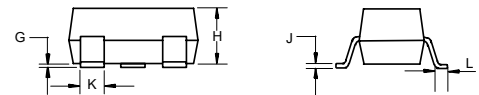
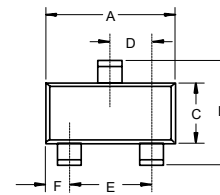
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



**350mW
Schottky Barrier
Diode
40 Volts**

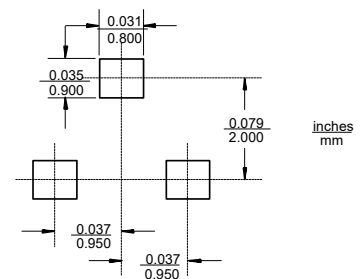
SOT-23



DIMENSIONS

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 Current Derating Curve

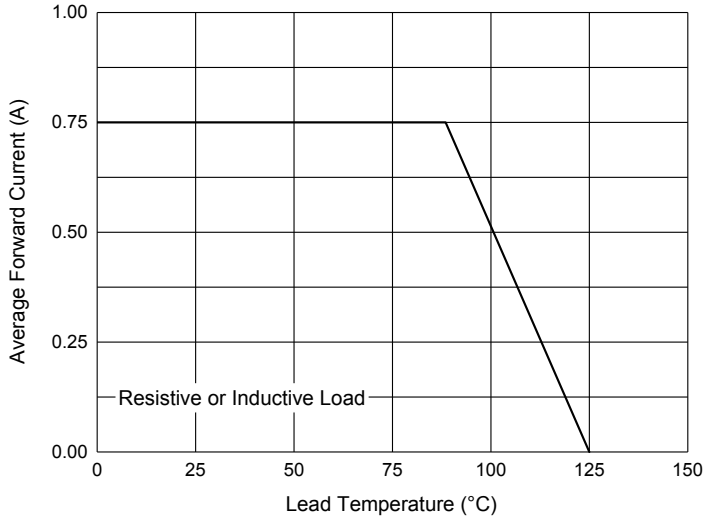


Fig. 2 - Typical Instantaneous Forward Characteristics

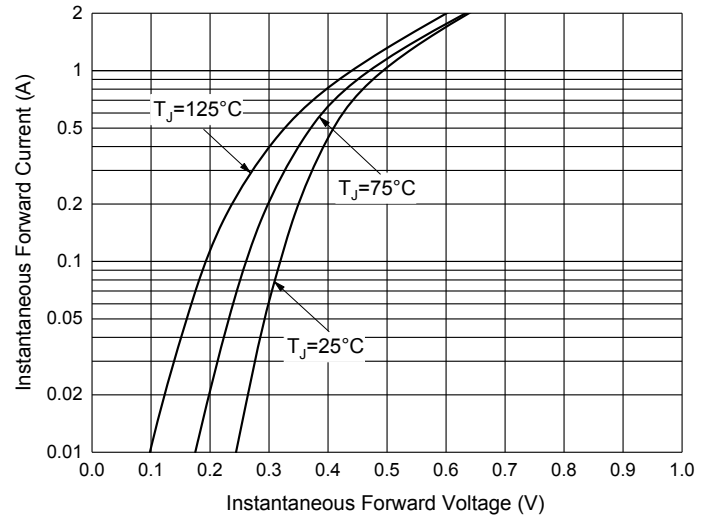


Fig. 3 - Typical Reverse Leakage Characteristics

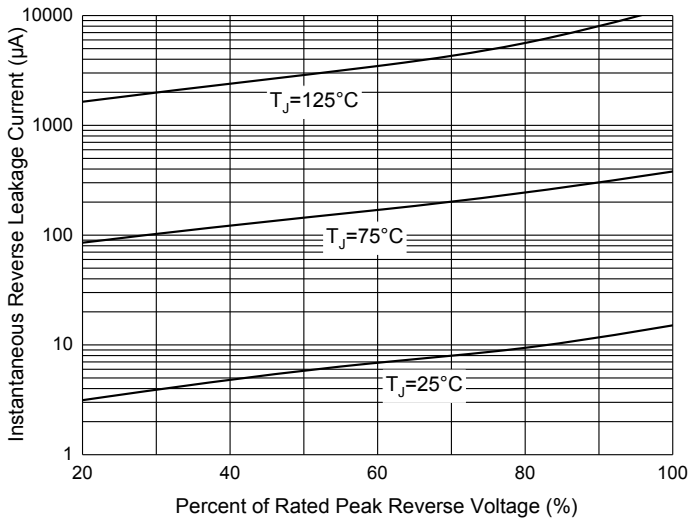
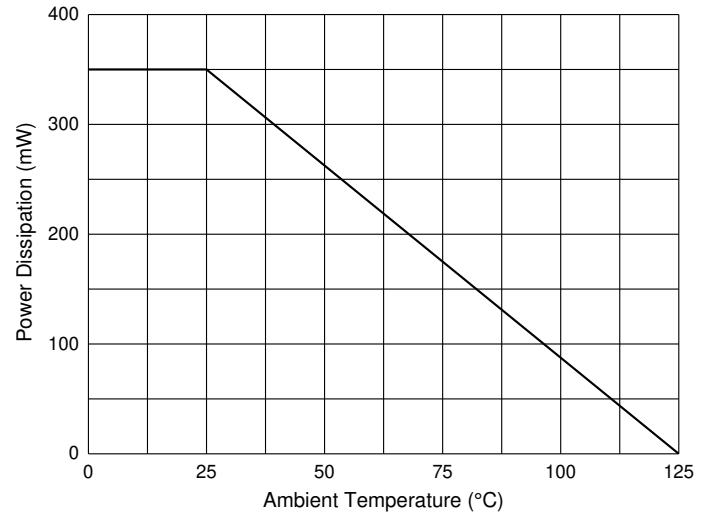


Fig. 4 - Power Derating Curve



Ordering Information

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

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