

**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 Available Upon Request By Adding Suffix "-HF"

**Maximum Ratings**

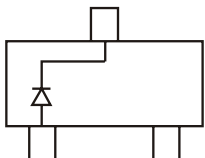
- Operating Junction Temperature Range: -55°C to 125°C
- Storage Temperature Range: -55°C to 150°C
- Typical Thermal Resistance: 286°C/W Junction to Ambient

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**

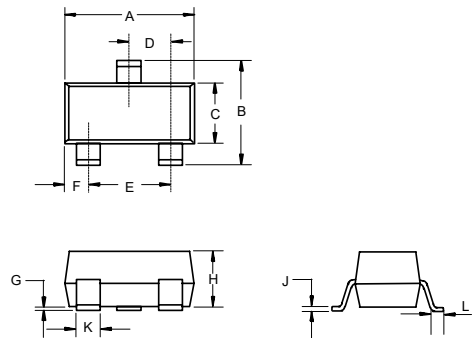
Average Forward Current	$I_{F(AV)}$	750mA			
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	5.5A		$t < 1s$	
Power Dissipation	$P_d$	350mW		$T_A = 25^\circ C$	
Forward Voltage	$V_F$	Min	Typ	Max	
		0.30V	0.34V	$I_F=50mA$	
		0.32V	0.36V	$I_F=100mA$	
		0.36V	0.39V	$I_F=250mA$	
		0.41V	0.44V	$I_F=500mA$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

**Internal Structure**



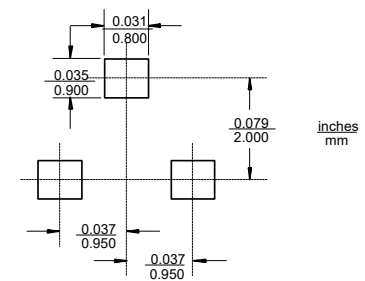
**350mW  
Schottky Barrier  
Diode  
40 Volts**

**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 Current Derating Curve

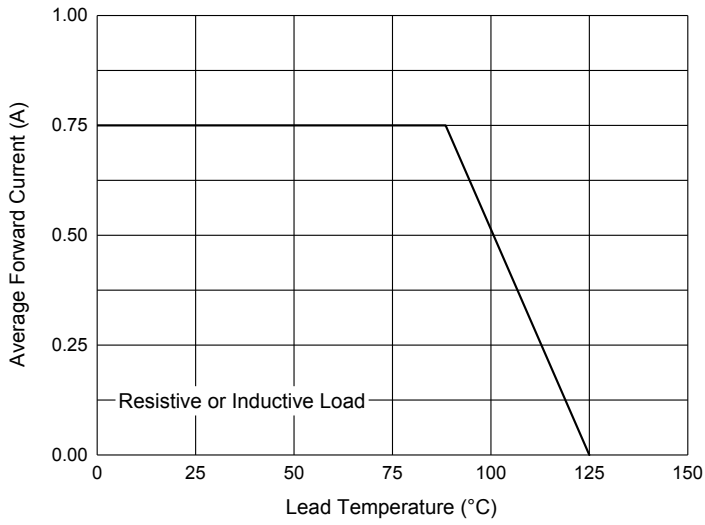


Fig. 2 - Typical Instantaneous Forward Characteristics

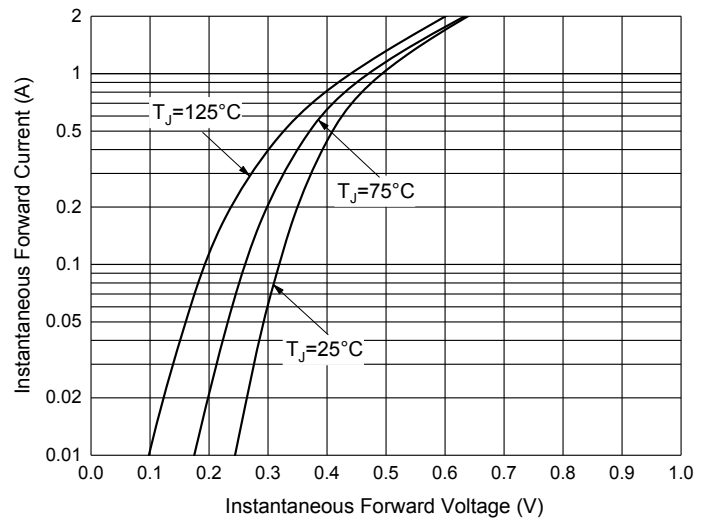


Fig. 3 - Typical Reverse Leakage Characteristics

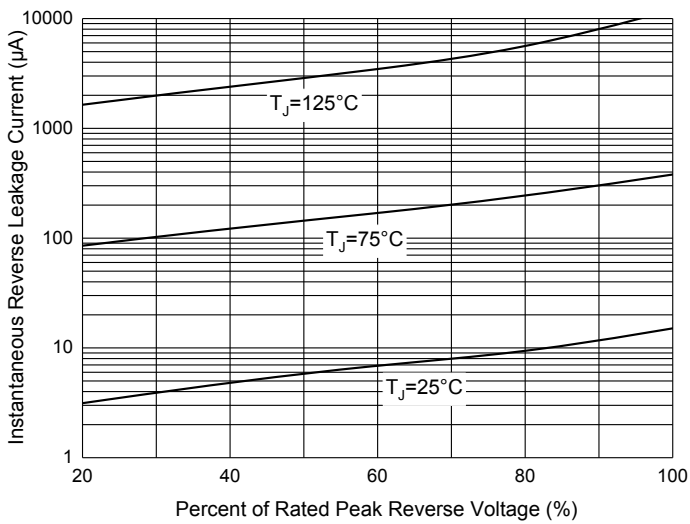
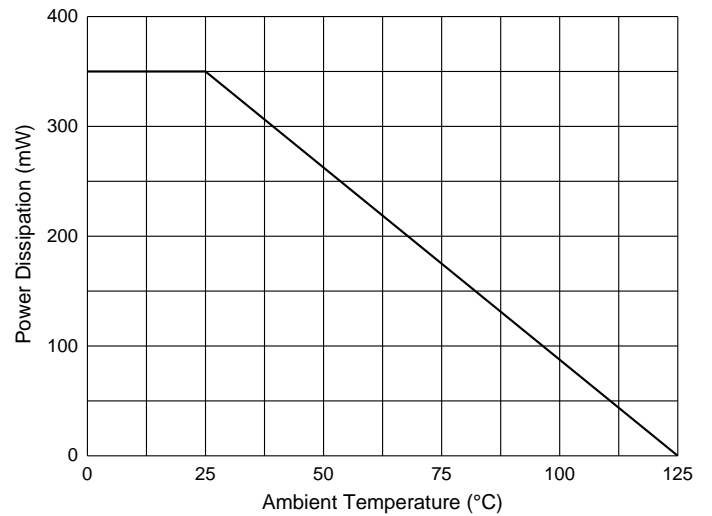


Fig. 4 - Power Derating Curve



## Ordering Information

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

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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