

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

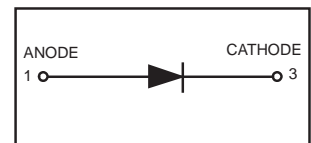
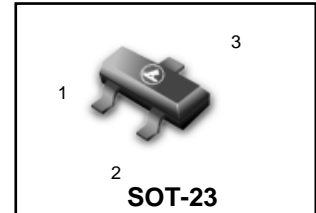
LBAT750LT1G

FEATURES

- Very Low Forward Voltage Drop
- High Conductance
- For Use in DC-DC Converter, PCMCIA, and Mobile Telecommunications Applications
- We declare that the material of product compliance with RoHS requirements.

DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LBAT750LT1G	K77	3000/Tape&Reel
LBAT750LT3G	K77	10000/Tape&Reel



MAXIMUM RATINGS (T_J = 125°C unless otherwise noted)

Rating	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	40	Volts
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	28	Volts
Average Rectified Current(Note 1)	I _o	0.75	Adc
Non-Repertitive Peak Forward Current	I _{FSM}	5.5	Adc
Power Dissipation(Note 1)	P _D	350	mW
Typical Thermal Resistance, Junction to Ambient Air(Note 1)	R _{θJA}	286	°C/W
Storage Temperature Range	T _J , T _{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage (I _R = 300 μA)(Note 2)	V _{(BR)R}	40	45	—	Volts
Reverse Leakage (V _R = 30 V) (Note 2)	I _R	—	50	100	μAdc
Forward Voltage (I _F = 50 mAdc) (Note 2)	V _F	—	225	280	mVdc
Forward Voltage (I _F = 100 mAdc) (Note 2)	V _F	—	235	310	mVdc
Forward Voltage (I _F = 250 mAdc) (Note 2)	V _F	—	290	350	mVdc
Forward Voltage (I _F = 500 mAdc) (Note 2)	V _F	—	340	420	mVdc
Forward Voltage (I _F = 750 mAdc) (Note 2)	V _F	—	390	490	mVdc
Forward Voltage (I _F = 1000 mAdc) (Note 2)	V _F	—	420	540	mVdc
Forward Voltage (I _F = 1500 mAdc) (Note 2)	V _F	—	475	650	mVdc
Total Capacitance (V _R = 0 V, f = 1.0 MHz)	C _T	—	175	—	pF
Total Capacitance (V _R = 25 V, f = 1.0 MHz)	C _T	—	25	—	pF

- Notes:
1. Part mounted on FR-4 PC board with recommended pad layout
 2. Short duration test pulse used to minimize self-heating effect.

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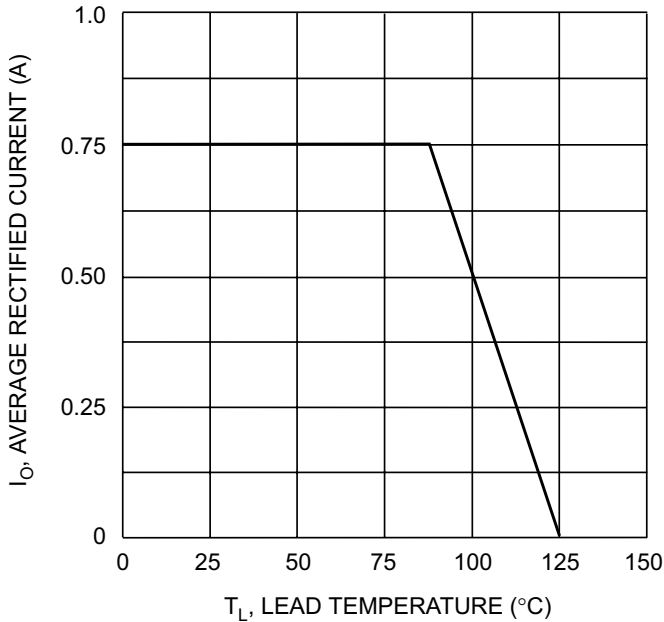


Fig. 1 Forward Current Derating Curve

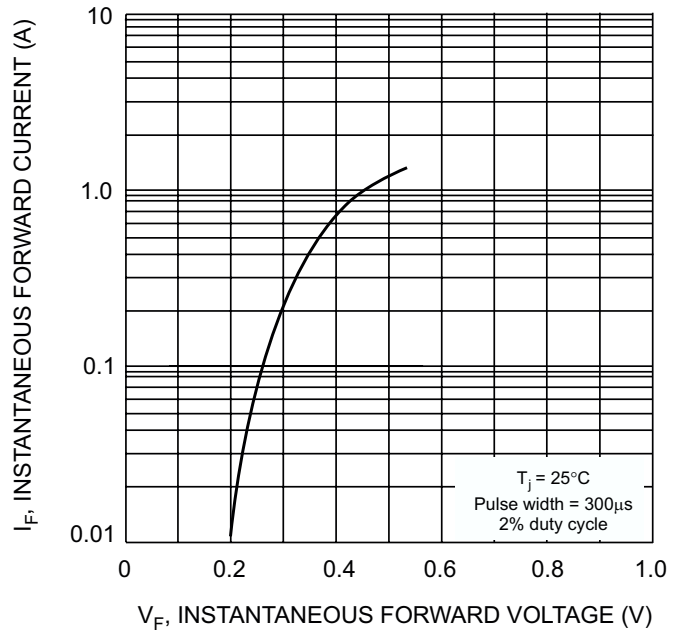


Fig. 2 Typical Forward Characteristics

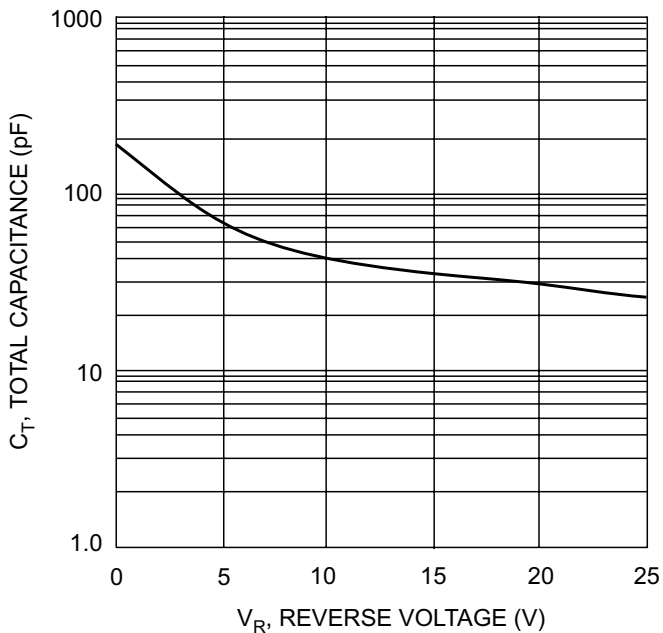


Fig. 3 Total Capacitance vs Reverse Voltage

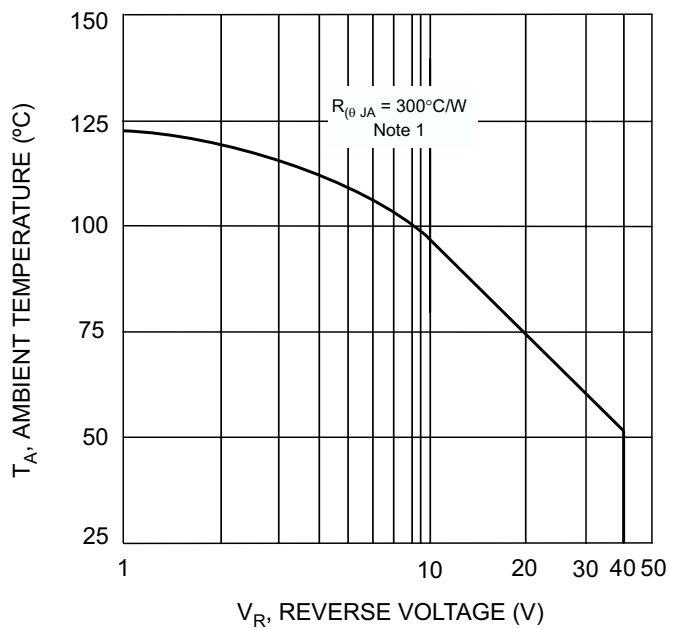
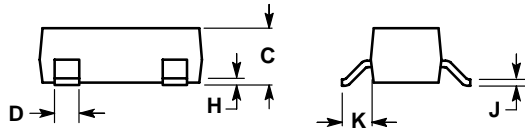
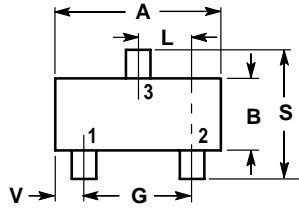


Fig. 4 Typical Safe Operating Area

Note: 1. Assumed application thermal conditions.
 $R_{\theta JA}$ varies depending on application.

LBAT750LT1G

SOT-23



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.1102	0.1197	2.80	3.04
B	0.0472	0.0551	1.20	1.40
C	0.0350	0.0440	0.89	1.11
D	0.0150	0.0200	0.37	0.50
G	0.0701	0.0807	1.78	2.04
H	0.0005	0.0040	0.013	0.100
J	0.0034	0.0070	0.085	0.177
K	0.0140	0.0285	0.35	0.69
L	0.0350	0.0401	0.89	1.02
S	0.0830	0.1039	2.10	2.64
V	0.0177	0.0236	0.45	0.60

