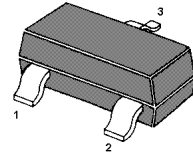
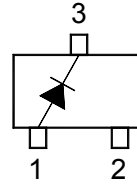


BAT750

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER DIODES

Features

- Very low forward voltage drop
- High conductance



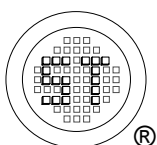
Marking Code: **K77**
SOT-23 Plastic Package

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum DC Blocking Voltage	V_R	40	V
Average Rectified Forward Current	$I_{F(AV)}$	0.75	A
Non-repetitive Peak Forward Surge Current ($t = 8.3 \text{ ms}$)	I_{FSM}	5.5	A
Power Dissipation	P_{tot}	350	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	286	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 125	$^\circ\text{C}$

Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown voltage at $I_R = 300 \mu\text{A}$	$V_{(BR)R}$	40	-	V
Forward voltage at $I_F = 50 \text{ mA}$ at $I_F = 100 \text{ mA}$ at $I_F = 250 \text{ mA}$ at $I_F = 500 \text{ mA}$ at $I_F = 750 \text{ mA}$ at $I_F = 1 \text{ A}$ at $I_F = 1.5 \text{ A}$	V_F	- - - - - - -	280 310 350 420 490 540 650	mV
Reverse current at $V_R = 30 \text{ V}$	I_R	-	100	μA
Total capacitance at $V_R = 0 \text{ V}, f = 1 \text{ MHz}$	C_T	-	175	pF



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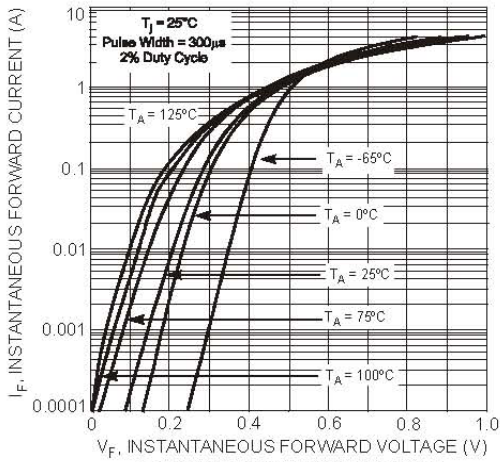


Fig. 1 Typical Forward Characteristics

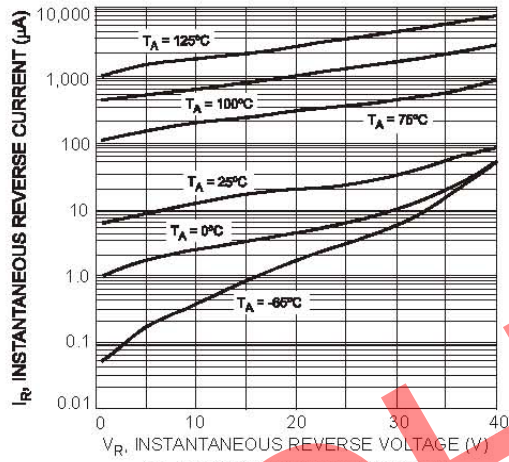


Fig. 2 Typical Reverse Characteristics

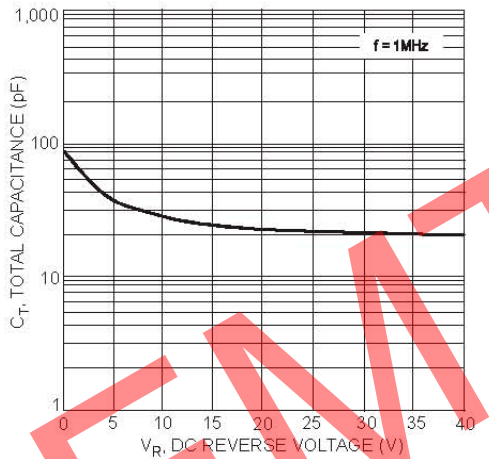


Fig. 3 Total Capacitance vs. Reverse Voltage

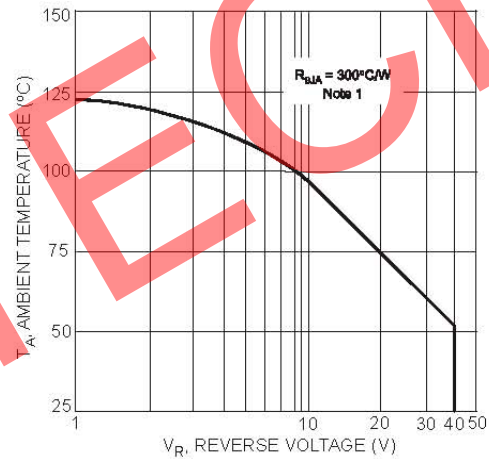


Fig. 4 Typical Safe Operating Area

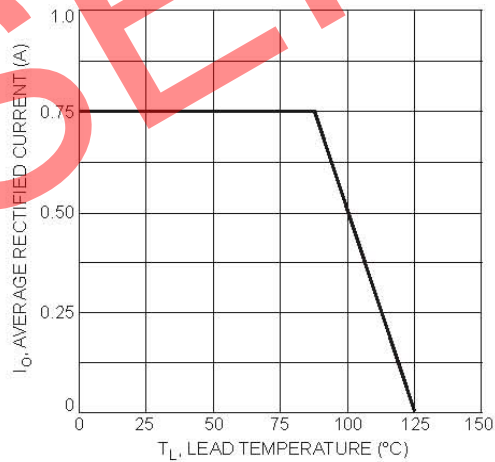
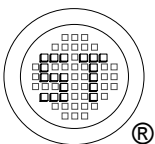


Fig. 5 Forward Current Derating Curve



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