

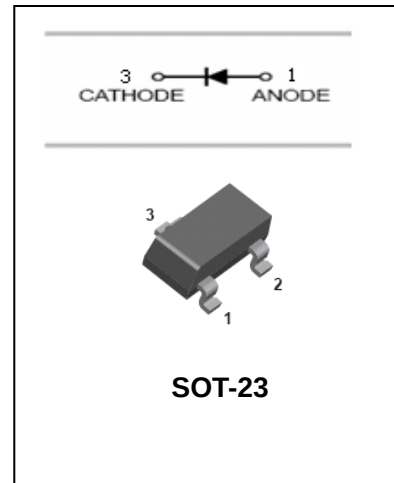
Schottky barrier diode

BAT750

FEATURES

- High conductance.
- Very low forward voltage drop.
- For use in DC-DC converter, PCMCIA, and mobile telecommunications application.

HF



APPLICATIONS

- 0.75 Surface mount schottky barrier rectifier.

ORDERING INFORMATION

Type No.	Marking	Package Code
BAT750	K77	SOT-23

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Limits	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}		
DC Reverse Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Current	I_O	750	mA
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load	I_{FSM}	5.5	A
Power Dissipation	P_d	350	mW
Typical Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	286	°C/W
Typical Thermal Resistance, Junction to Ambient Air	$R_{\theta JC}$	160	°C/W
Operating Junction Temperature Range	T_j	125	°C
Storage Temperature Range	T_{STG}	-40 to +125	°C

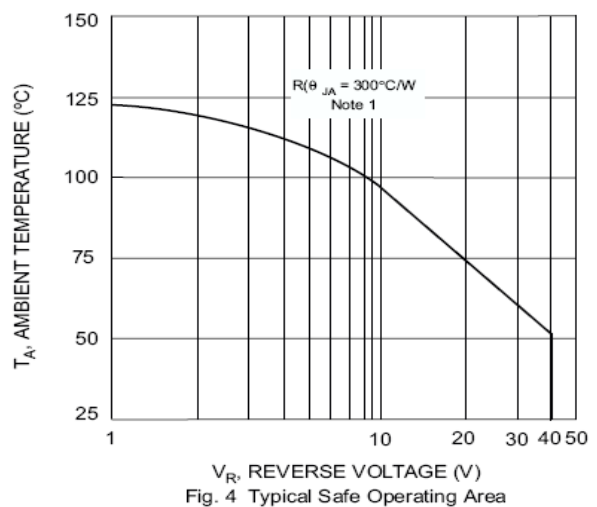
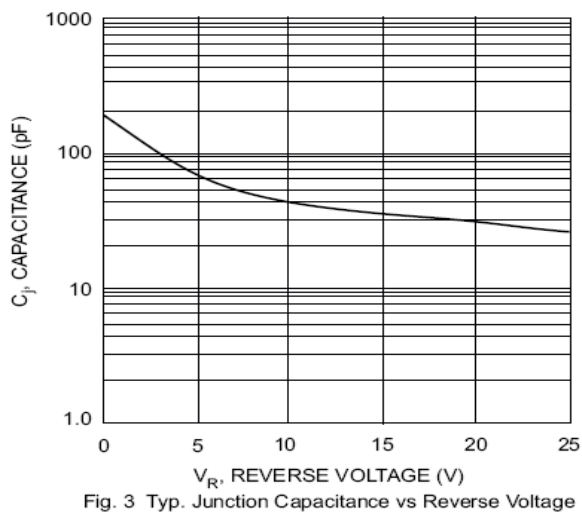
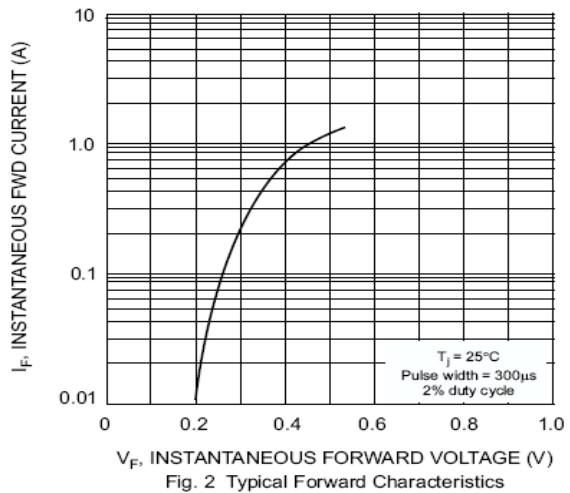
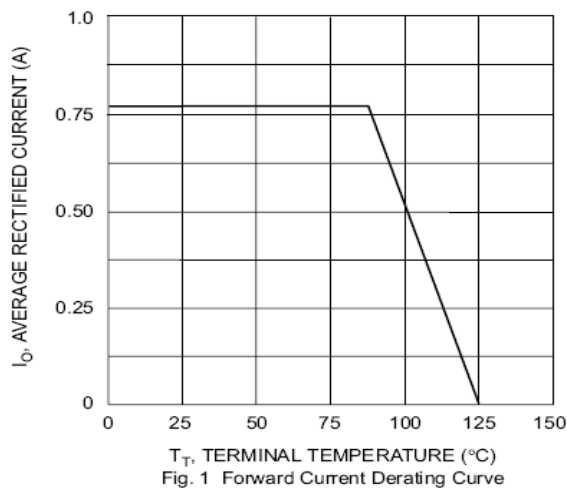
Schottky barrier diode

BAT750

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	40	45	-	V	$I_R=300\mu A$
Forward Voltage	V_F	-	300 320 360 410 450 480 550	340 360 390 440 490 540 650	mV	$I_F=50mA$ $I_F=100mA$ $I_F=250mA$ $I_F=500mA$ $I_F=750mA$ $I_F=1000mA$ $I_F=1500mA$
Maximum Reverse Current	I_R	-	60	100	μA	$V_R=30V$
Junction Capacitance	C_j	-	175 25	-	pF	$V_R=0V, f=1.0MHz$ $V_R=25V, f=1.0MHz$

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



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

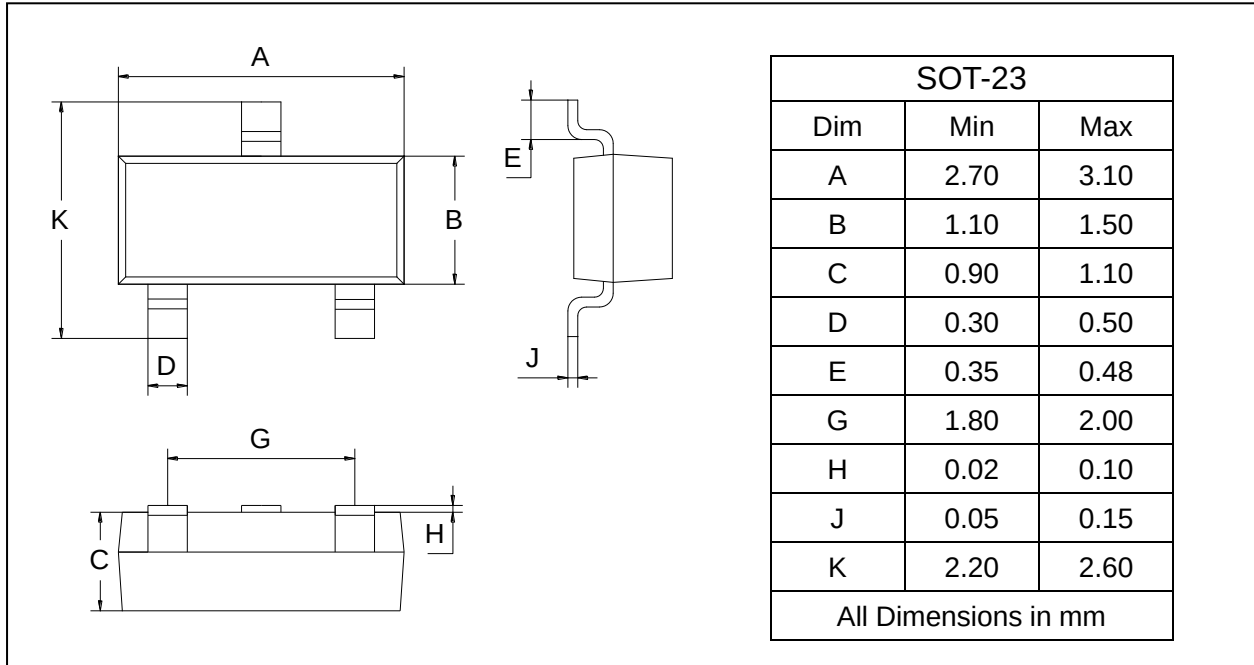
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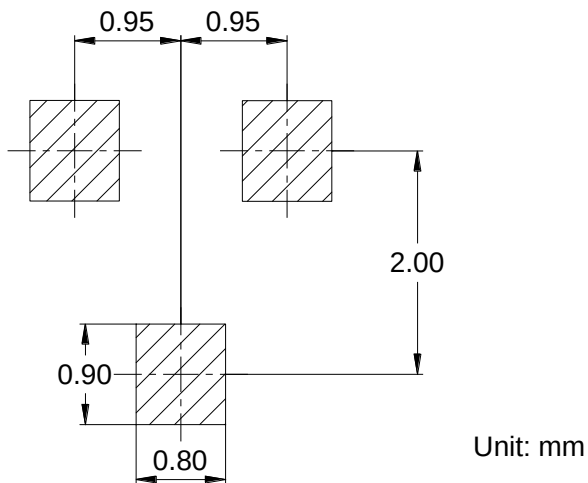
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BAT750	SOT-23	3000 pcs / Tape & Reel