



BAT750

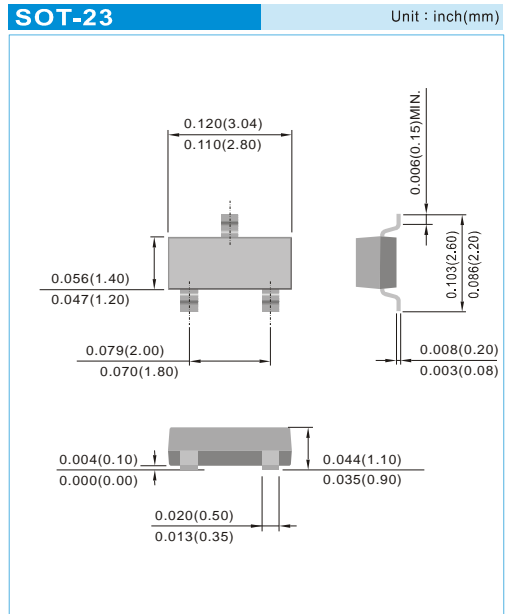
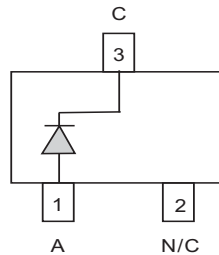
SCHOTTKY BARRIER DIODE

FEATURES

- Low V_F
- High current capability
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case : SOT-23, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0003 ounces, 0.0084 grams
- Marking : 750



ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Limit	Unit
Collector reverse voltage	V_R	40	V
RMS reverse voltage	$V_{R(RMS)}$	28	V
Forward current (continuous)	I_F	750	mA
Forward voltage@ $I_F=750mA$	V_F	490	mV
Average peak forward current; DC=50%	I_{FAV}	1500	mA
Non repetitive forward current $t_{\leq 100\mu s}$ $t_{\leq 8.3ms}$	I_{FSM}	12 5.5	A
Power dissipation@ $T_A=25^\circ C$	P_{TOT}	350	mW
Typical thermal resistance, junction to ambient air	$R_{\theta JA}$	286	$^\circ C/W$
Storage temperature range	T_{STG}	-55 to + 150	$^\circ C$
Junction temperature	T_J	125	$^\circ C$



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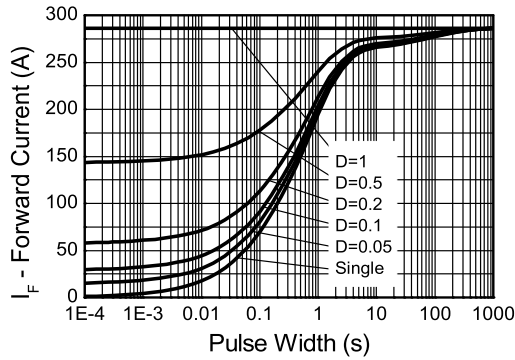
ELECTRICAL CHARACTERISTICS (@T_A=25°C unless otherwise stated)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse breakdown voltage	V _{(BR)R}	I _R =300μA	40	60	-	V
Forward voltage(Note 1)	V _F	I _F =50mA	-	250	280	mV
		I _F =100mA	-	270	310	
		I _F =250mA	-	310	350	
		I _F =500mA	-	350	420	
		I _F =750mA	-	390	490	
		I _F =1000mA	-	420	540	
Reverse current	I _R	V _R =30V	-	50	100	μA
Off state junction capacitance	C _J	V _R =25V, f=1.0MHz	-	18	-	pF

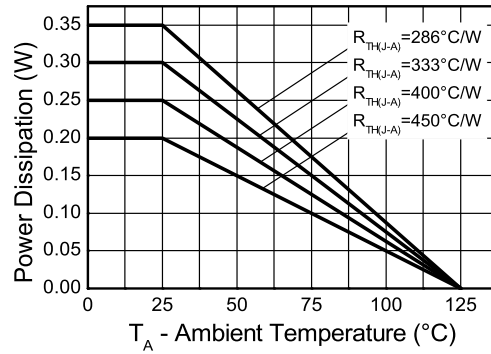
Note : 1. Measured under pulsed conditions. Pulse width = 300μ duty cycle < 2%



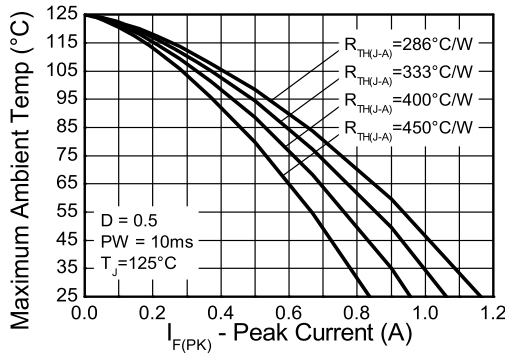
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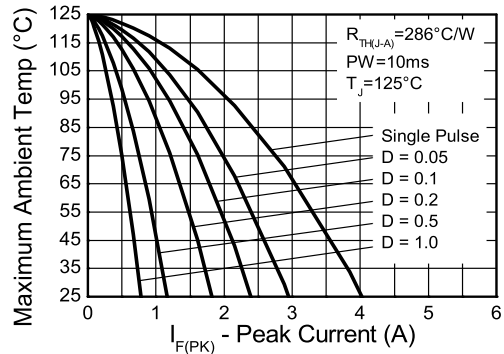
Transient Thermal Impedance



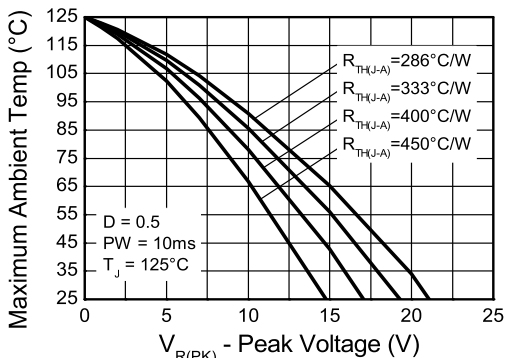
Derating Curves



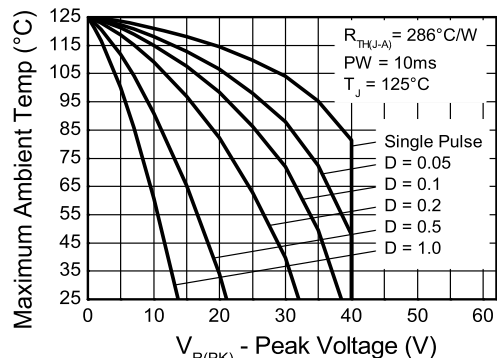
Forward Safe Operating Area



Forward Safe Operating Area



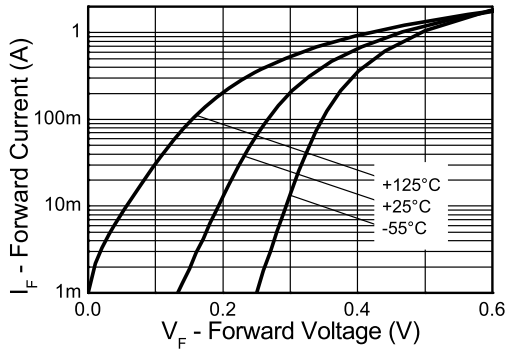
Reverse Safe Operating Area



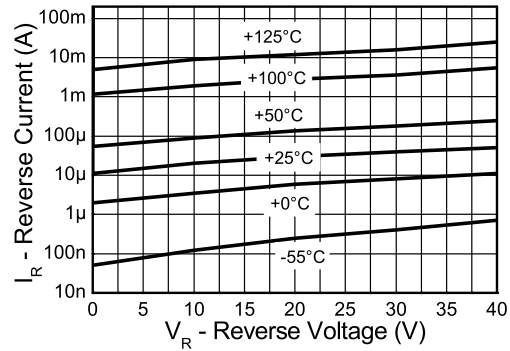
Reverse Safe Operating Area



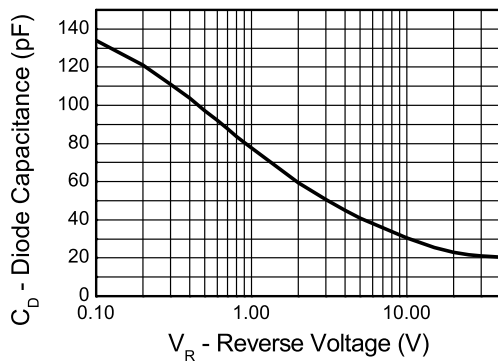
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Typical Forward Characteristics



Typical Reverse Characteristics



Capacitance v Reverse Voltage

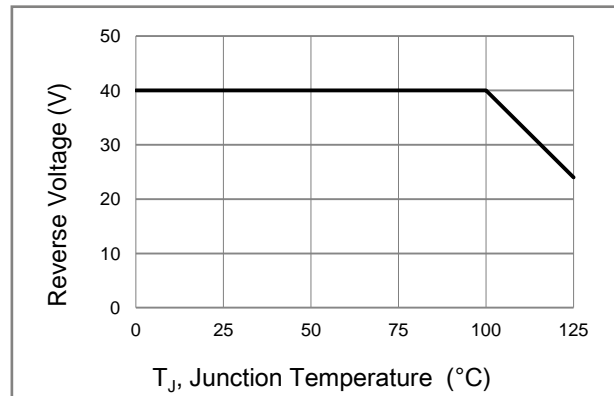


Fig. %\$ Operating Temperature Derating Curve

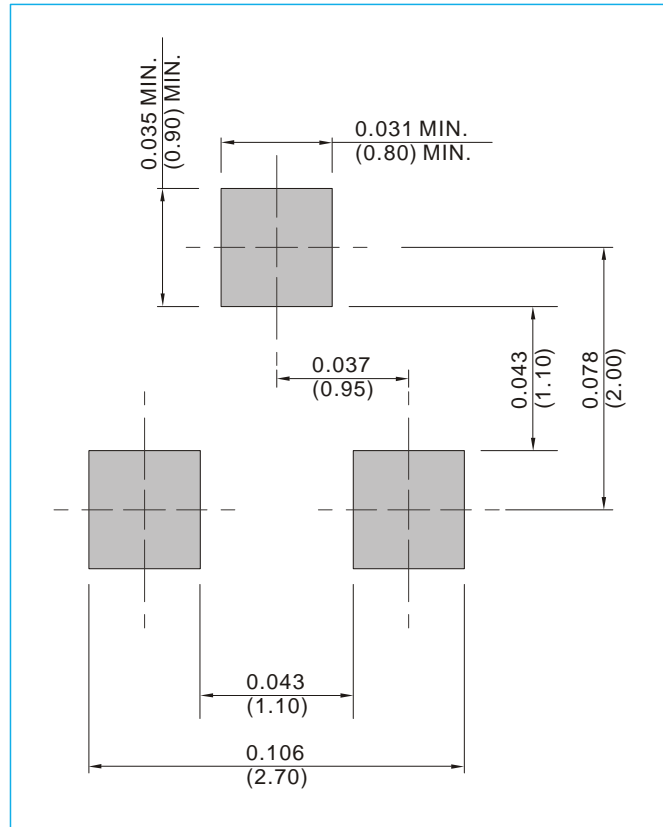


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MOUNTING PAD LAYOUT

SOT-23

Unit : inch(mm)



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel



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Part No_packing code_Version

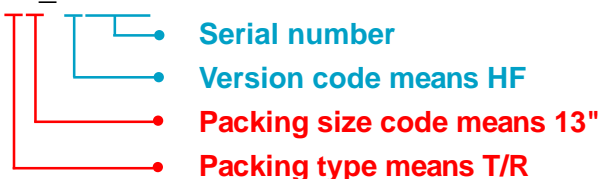
BAT750_R1_00001

BAT750_R2_00001

For example :

RB500V-40_R2_00001

Part No.



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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