BAT721C / BAT721S

SCHOTTKY BARRIER (DOUBLE) DIODES

VOLTAGE	40 Volt	CURRENT	200 mA

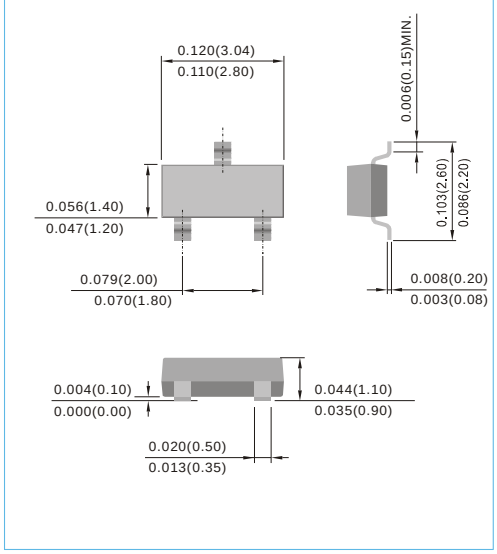
FEATURES

- Ultra high switching speed
- Low forward voltage
- Guard ring protected
- Small plastic SMD package
- Ultra high-speed switching
- Voltage clamping
- Protection circuits
- 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
- Weight: 0.0003 ounces, 0.0084 grams
- Marking: 72C

SOT-23 Unit : inch(mm)



LIMITING VALUES

PARAMETER	CONDITIONS	SYMBOL	MIN.	MAX.	UNIT
Continuous reverse voltage		V_R	-	40	V
Continuous forward current		I_F	-	200	mA
Non repetitive peak forward current	tp=8.3ms half sinewave	I_{FSM}	-	1	A
Storage temperature range		T_{STG}	-65	+150	°C
Junction temperature		T_J	-	125	°C

1. In accordance with the Absolute Maximum Rating System (IEC 134).

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	BAT721C	BAT721S	UNIT
Marking code	-	72C	72S	-
Thermal resistance from junction to ambient	$R_{\theta JA}$	556		°C/W
Circuit fight	-	Common Cathode	Series	-

2. Refer to SOT-23 standard mounting conditions.
3. Mount on FR-5 1x0.75x0.062 in.

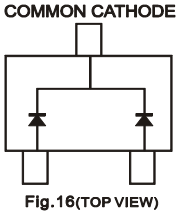


Fig.16(TOP VIEW)

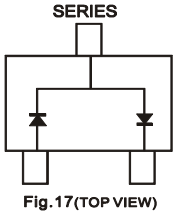


Fig.17(TOP VIEW)

BAT721C / BAT721S

ELECTRICAL CHARACTERISTICS

Tj=25C unless otherwise specified.

PARAMETER	SYMBOL	CONDITIONS	MIN.	MAX.	UNIT
Continuous forward voltage	V_F	I_F=10mA I_F=100mA I_F=200mA	-	300 420 550	mV
Continuous reverse current	I_R	V_R=30V	-	15	µA
		V_R=30V, T_J=100°C	-	3	mA
Diode capacitance	C_d	f=1MHz, V_R=0	40	50	pF

4. Pulse test : tp<300µs, δ < 0.02.

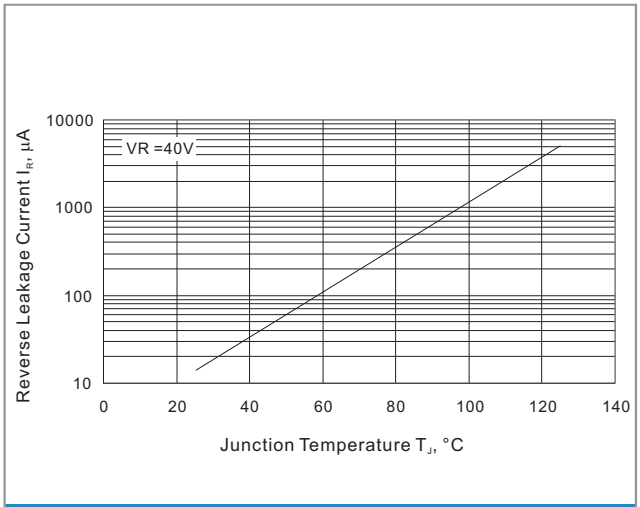


FIG. 1 Reverse Leakage Current vs. Junction Temperature

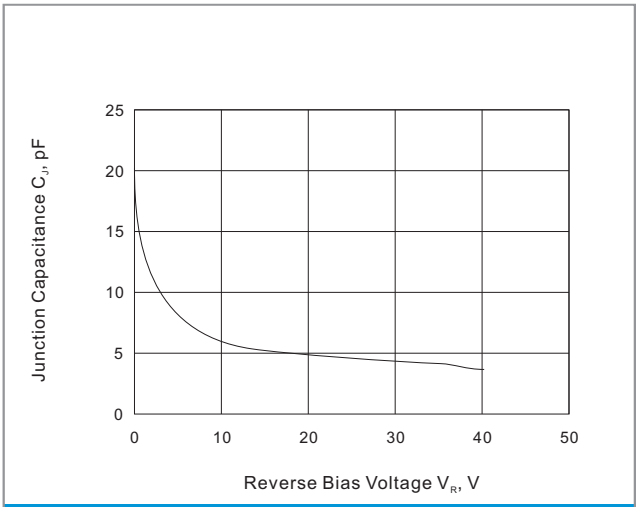


FIG. 2 Typical Junction Capacitance under Bias

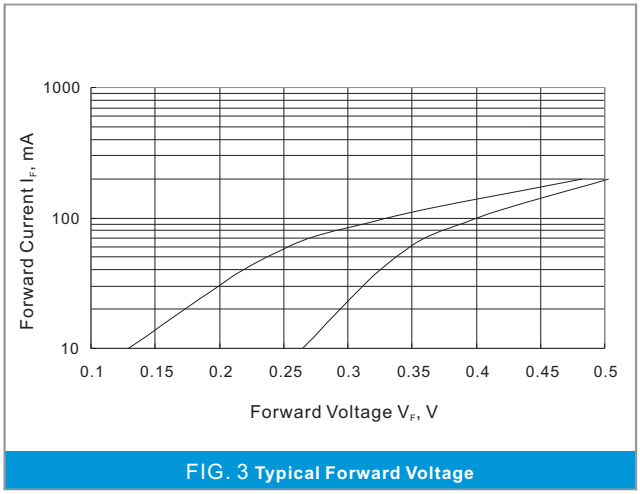


FIG. 3 Typical Forward Voltage

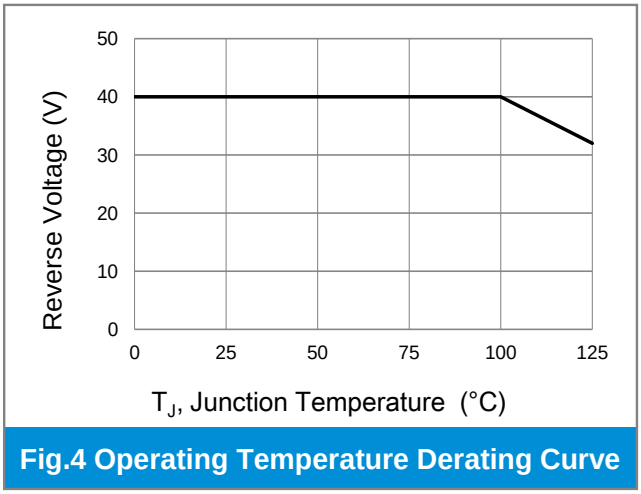
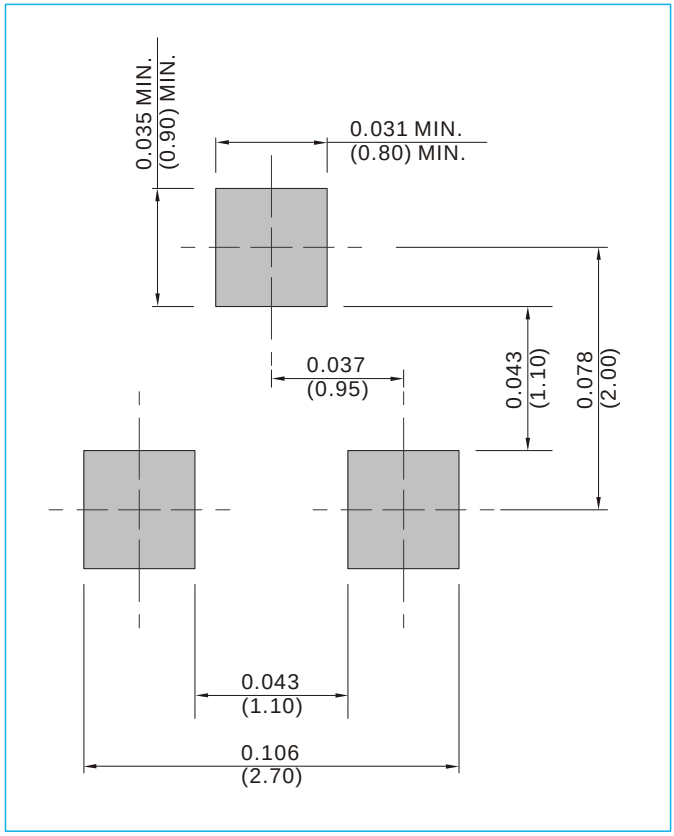


Fig.4 Operating Temperature Derating Curve

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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

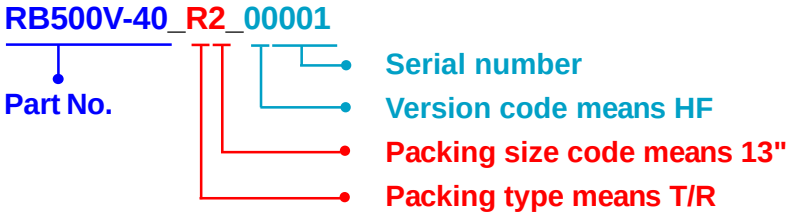
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Part No_packing code_Version

BAT721C_R1_00001

BAT721C_R2_00001

For example :



Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th 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			

BAT721C / BAT721S

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