



# BAT721C / BAT721S

## SCHOTTKY BARRIER (DOUBLE) DIODES

**VOLTAGE** 40 Volts **CURRENT** 200 mA

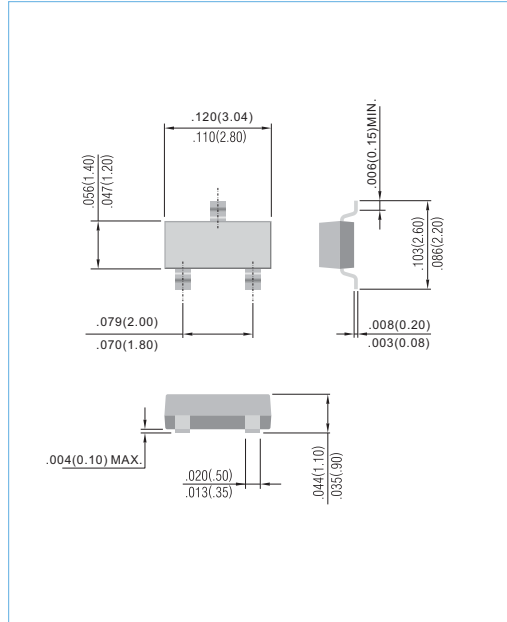
### FEATURES

- Low forward voltage
- Guard ring protected
- Small plastic SMD package
- Ultra high-speed switching
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: SOT-23, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Weight: 0.0003 ounce, 0.0084 gram

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 JEDEC method	$I_{FSM}$	-	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 SOT23 standard mounting conditions.
3. Mount on FR-5 1x0.75x0.062 in.

COMMON CATHODE

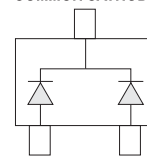


Fig.16

SERIES

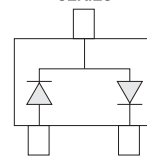


Fig.17

PAN JIT RESERVES THE RIGHT TO CHANGE THE SPECIFICATION ANY TIME WITHOUT NOTICE IN ORDER TO IMPROVE THE DESIGN AND SUPPLY THE BEST POSSIBLE PRODUCT.



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## ELECTRICAL CHARACTERISTICS

T<sub>j</sub>=25°C unless otherwise specified.

PARAMETER	SYMBOL	CONDITIONS	MIN.	MAX.	UNIT
Continuous forward voltage	V <sub>F</sub>	I <sub>F</sub> =10mA I <sub>F</sub> =100mA I <sub>F</sub> =200mA	-	300 420 550	mV
Continuous reverse current	I <sub>R</sub>	V <sub>R</sub> =30V	-	15	μA
		V <sub>R</sub> =30V, T <sub>J</sub> =100°C	-	3	
Diode capacitance	C <sub>d</sub>	f=1MHz, V <sub>R</sub> =0	40	50	pF

4. Pulse test : tp<300μs, δ < 0.02.

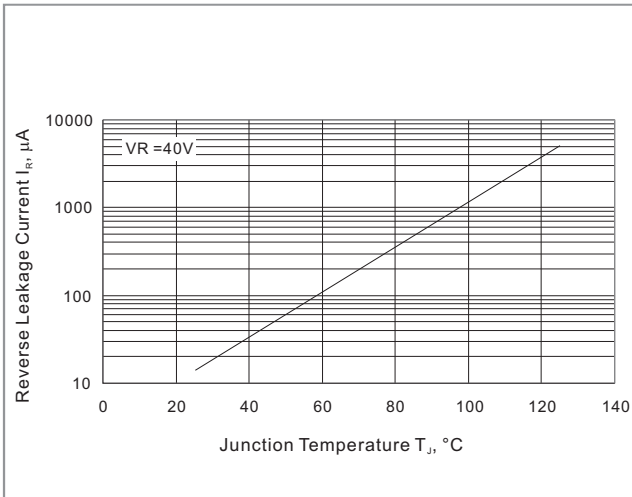


FIG. 1-Reverse Leakage Current vs. Junction Temperature

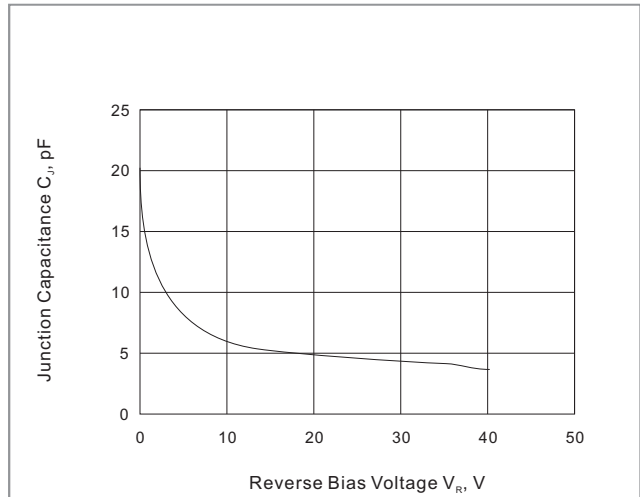


FIG. 2-Typical Junction Capacitance under Bias

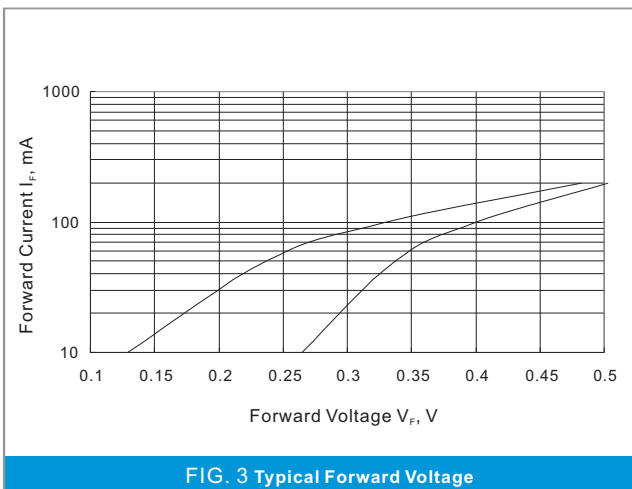
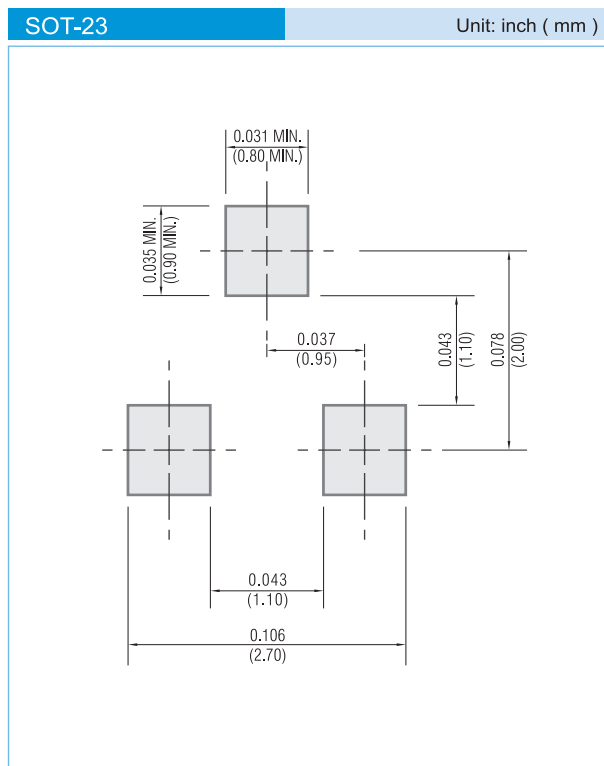


FIG. 3 Typical Forward Voltage



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

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

## LEGAL STATEMENT

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