BAT721C-AU / BAT721S-AU

SCHOTTKY BARRIER (DOUBLE) DIODES

VOLTAGE	40 Volt	CURRENT	200 mA

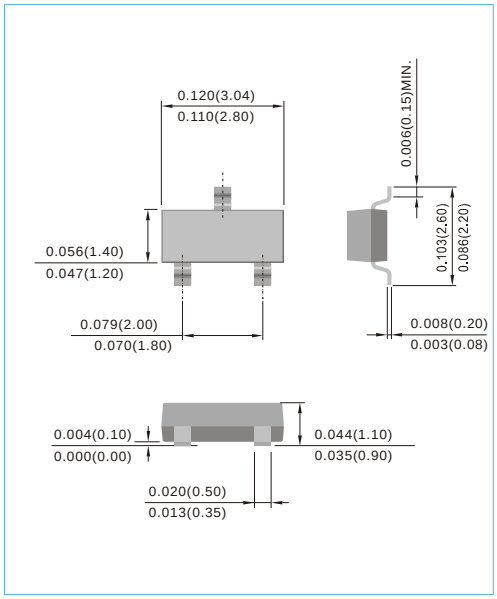
FEATURES

- Ultra high switching speed
- Low forward voltage
- Guard ring protected
- Small plastic SMD package
- Ultra high-speed switching
- Voltage clamping
- Protection circuits
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

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

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-AU	BAT721S-AU	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.

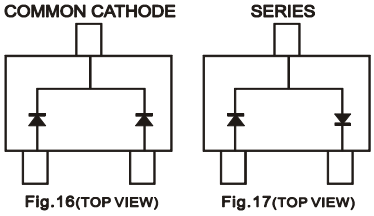


Fig.16(TOP VIEW) Fig.17(TOP VIEW)

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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.

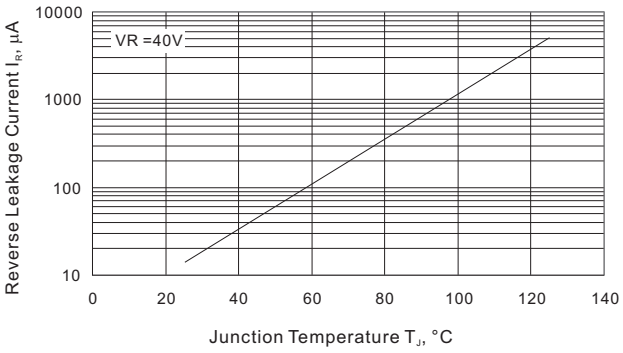

FIG. 1 Reverse Leakage Current vs. Junction Temperature

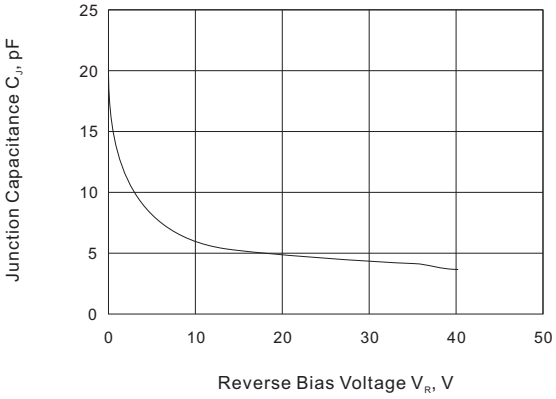

FIG. 2 Typical Junction Capacitance under Bias

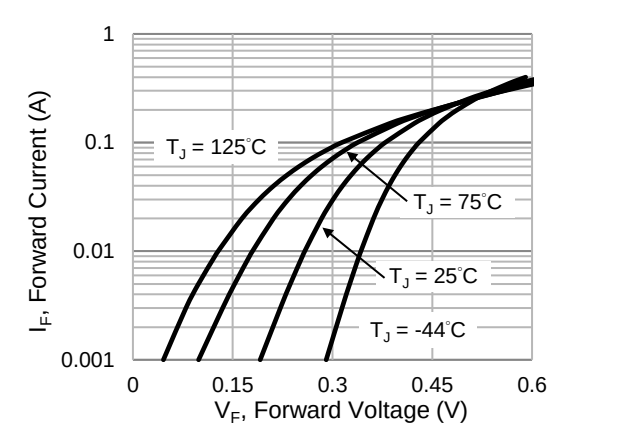

FIG. 3 Typical Forward Voltage

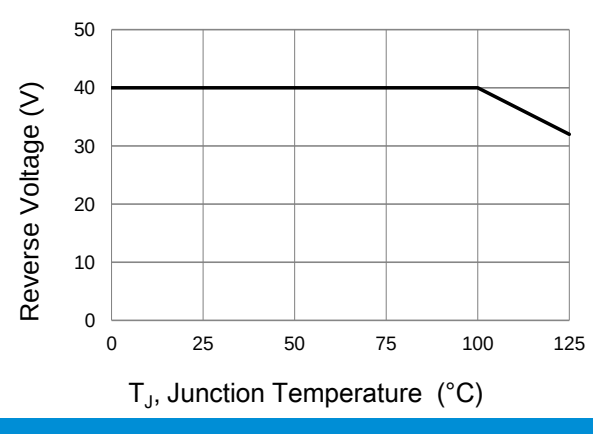

Fig.4 Operating Temperature Derating Curve

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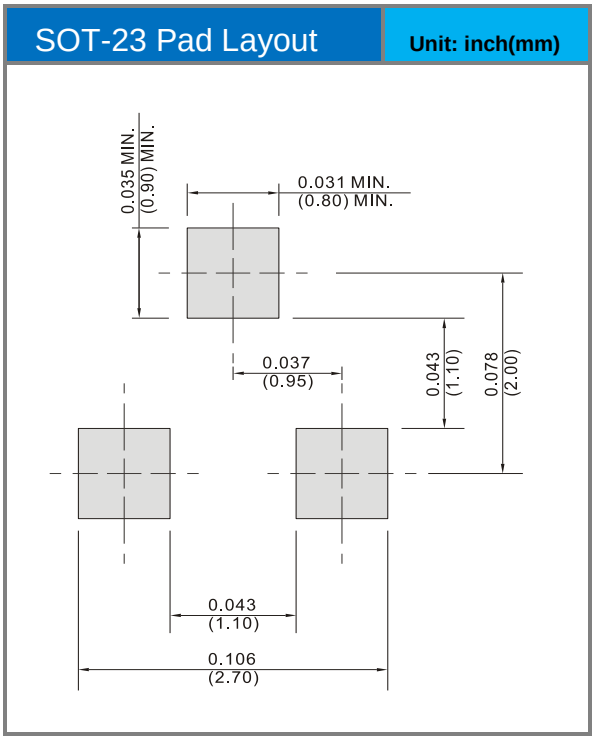
Product and Packing Information

Part No.	Package Type	Packing Type	Marking
BAT721C-AU	SOT-23	3K pcs / 7” reel	72C
BAT721C-AU	SOT-23	12K pcs / 13” reel	72C
BAT721S-AU	SOT-23	3K pcs / 7” reel	72S
BAT721S-AU	SOT-23	12K pcs / 13” reel	72S

Mounting Pad Layout

SOT-23 Pad Layout — Unit: inch(mm)



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