

BAT54-AU SERIES

SURFACE MOUNT SCHOTTKY BARRIER

VOLTAGE 30 Volt **CURRENT** 0.2 Ampere

FEATURES

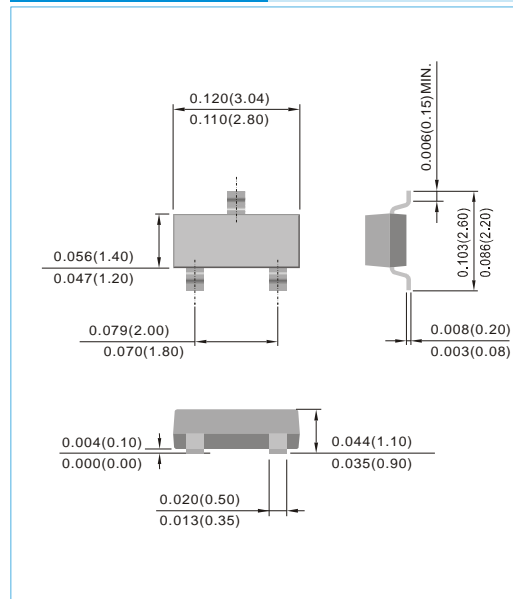
- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.
- Acquire quality system certificate : TS16949
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

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

SOT-23

Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. For capacitive load, derate current by 20%.

Parameter	Symbol	BAT54-AU	BAT54A-AU	BAT54C-AU	BAT54S-AU	Units
Forward Power Dissipation@T _A =25°C	P _D	225				mW
Peak Repetitive Reverse Voltage	V _{RRM}	30				V
Maximum Average Forward Current at T _A =75°C	I _O	0.2				A
Repetitive Peak Forward Current (tp=8.3ms,50%Duty Cycle)	I _{FRM}	300				mA
Peak Forward Surge Current, 1s	I _{FSM}	0.6				A
Maximum Instantaneous Forward Voltage @ I _F =1mA @ I _F =100mA	V _F	0.32 0.6				V
Typical Instantaneous Forward Voltage @ I _F =0.1mA	V _F	0.22				V
Maximum DC Reverse Current at Rated DC Blocking Voltage@V _R =25V	I _R	2				μA
Junction Capacitance at V _R =1V	C _J	10				pF
Thermal Resistance, Junction to Ambient	R _{θJA}	500				°C/ W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +125				°C
Circuit Figure	-	Single	Common Anode	Common Cathode	Series	-

Note : 1. I_F=10mA through I_R=10mA to I_R=1mA, R_L=100Ω.

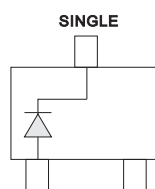


Fig.14

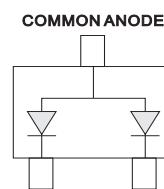


Fig.15

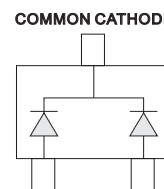


Fig.16

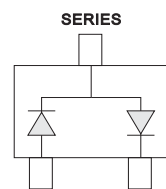


Fig.17

BAT54-AU SERIES

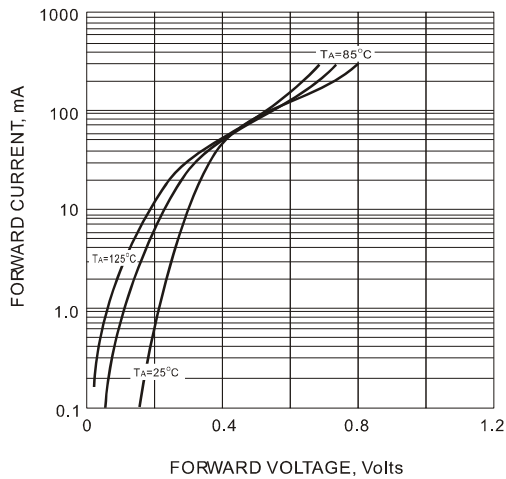


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

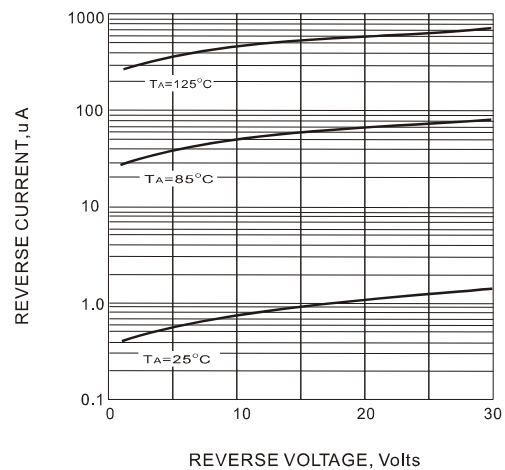


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

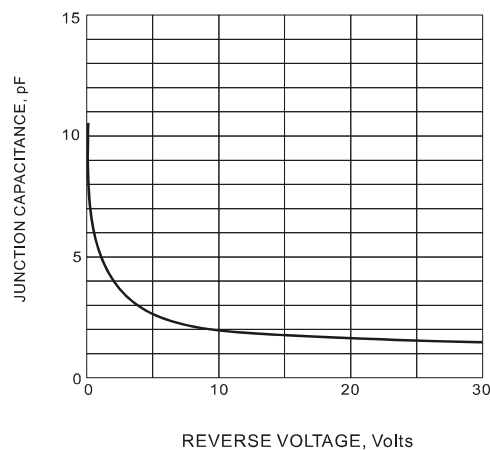


FIG. 3 TYPICAL JUNCTION CAPACITANCE

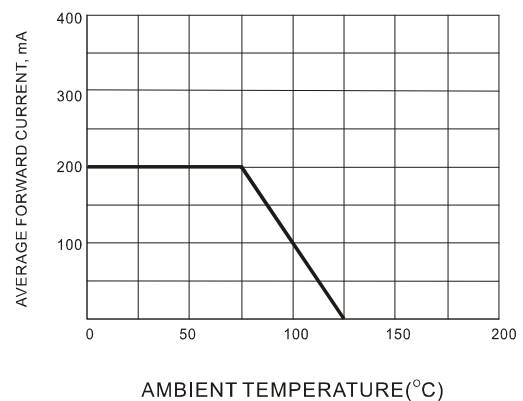


FIG. 4 FORWARD CURRENT DERATING

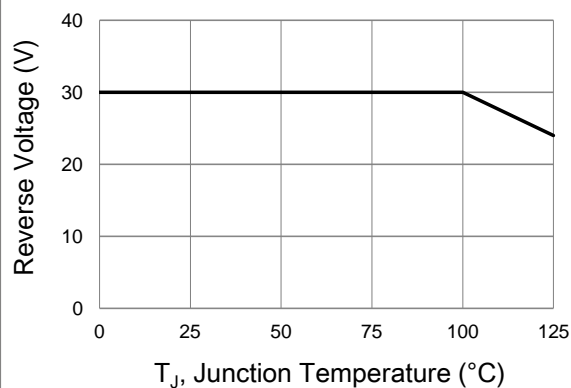


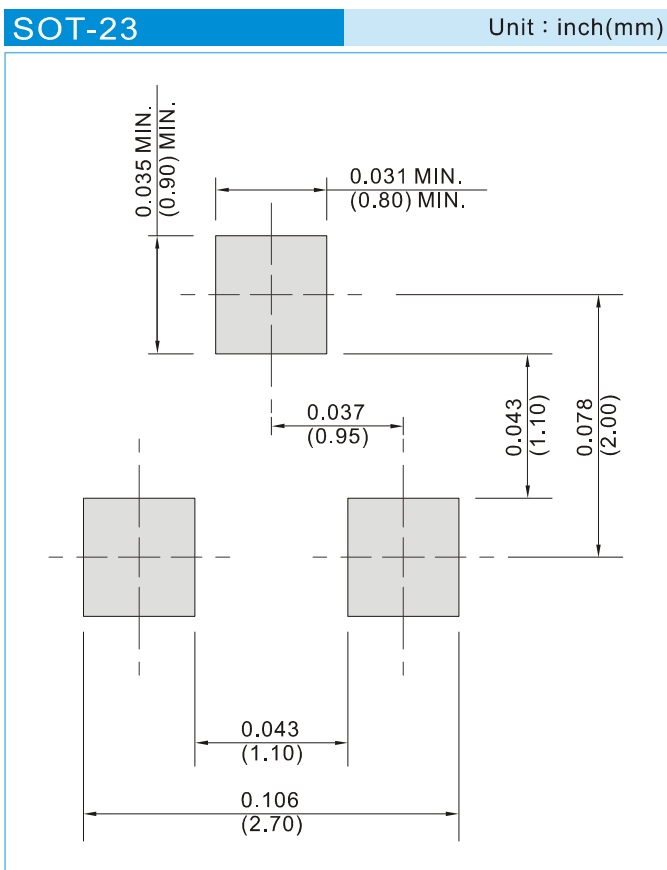
FIG. 5 OPERATING TEMPERATURE DERATING CURVE

BAT54-AU SERIES

PART NO PACKING CODE VERSION

Part No Packing Code	Package Type	Packing Type	Marking	Version
BAT54-AU_R1_000A1	SOT-23	3K pcs / 7" reel	L4	Halogen free
BAT54-AU_R2_000A1	SOT-23	12K pcs / 13" reel	L4	Halogen free
BAT54A-AU_R1_000A1	SOT-23	3K pcs / 7" reel	L42	Halogen free
BAT54A-AU_R2_000A1	SOT-23	12K pcs / 13" reel	L42	Halogen free
BAT54C-AU_R1_000A1	SOT-23	3K pcs / 7" reel	L43	Halogen free
BAT54C-AU_R2_000A1	SOT-23	12K pcs / 13" reel	L43	Halogen free
BAT54S-AU_R1_000A1	SOT-23	3K pcs / 7" reel	L44	Halogen free
BAT54S-AU_R2_000A1	SOT-23	12K pcs / 13" reel	L44	Halogen free

MOUNTING PAD LAYOUT





BAT54-AU SERIES

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.