



# BAT54!5I SERIES

## SURFACE MOUNT SCHOTTKY BARRIER

**VOLTAGE** 30 Volts    **CURRENT** 0.2 Amperes

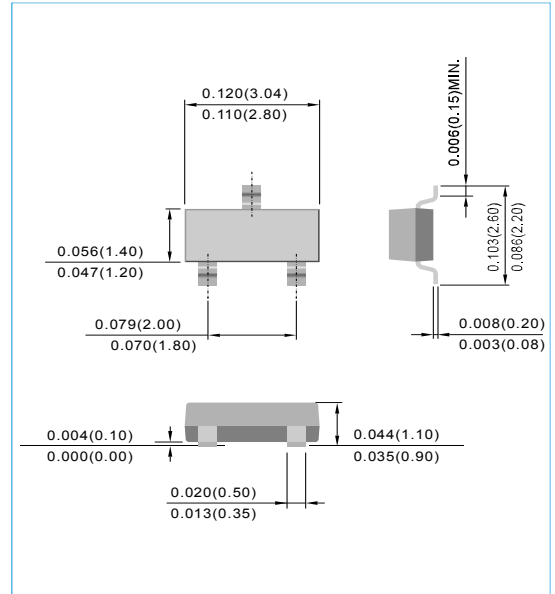
**SOT-23**    Unit : inch(mm)

### 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 comply with EU RoHS 2011/65/EU directives.
- 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



### 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
Marking code	-	L4	L42	L43	L44	-
Forward Power Dissipation@T <sub>A</sub> =25°C	P <sub>D</sub>	225				mW
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	30				V
Maximum Average Forward Current at T <sub>A</sub> =75°C	I <sub>O</sub>	0.2				A
Repetitive Peak Forward Current(tp=8.3ms,50%Duty Cycle)	I <sub>FRM</sub>	300				mA
Peak Forward Surge Current, 1.0s (JEDEC method)	I <sub>FSM</sub>	0.6				A
Maximum Instantaneous Forward Voltage @ I <sub>F</sub> =1mA @ I <sub>F</sub> =100mA	V <sub>F</sub>	0.32 0.8				V
Maximum DC Reverse Current at Rated DC Blocking Voltage@V <sub>R</sub> =25V	I <sub>R</sub>	2.0				uA
Junction Capacitance at V <sub>R</sub> =1V	C <sub>J</sub>	10				pF
Thermal Resistance, Junction to Ambient	R <sub>θJA</sub>	500				°C/ W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 TO +125				°C
Circuit Figure	-	Single	Common Anode	Common Cathode	Series	-

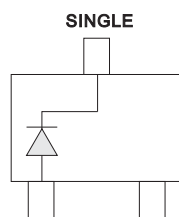


Fig.14

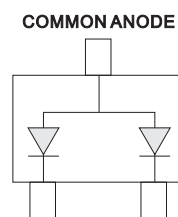


Fig.15

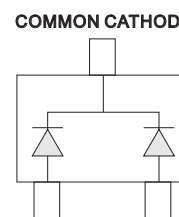


Fig.16

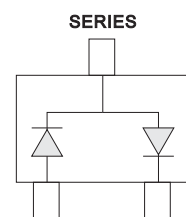


Fig.17



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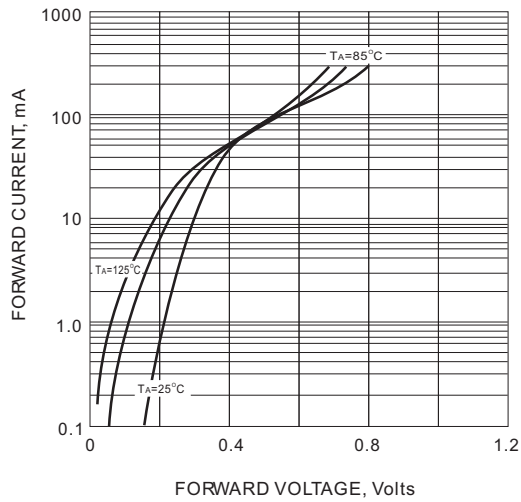


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

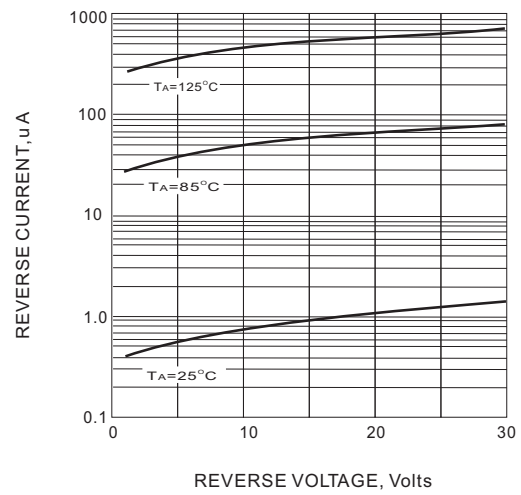


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

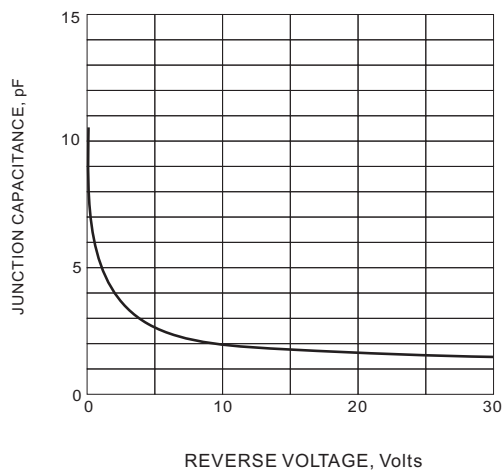


FIG. 3 TYPICAL JUNCTION CAPACITANCE

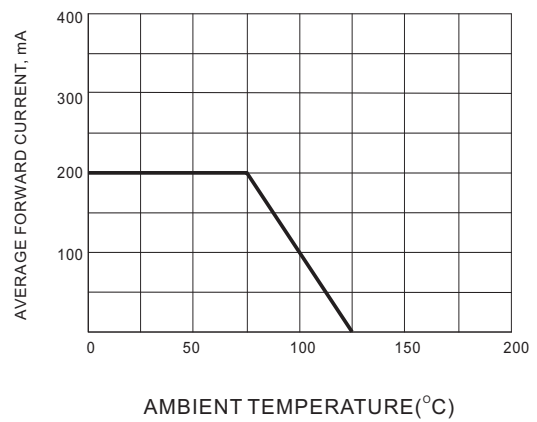
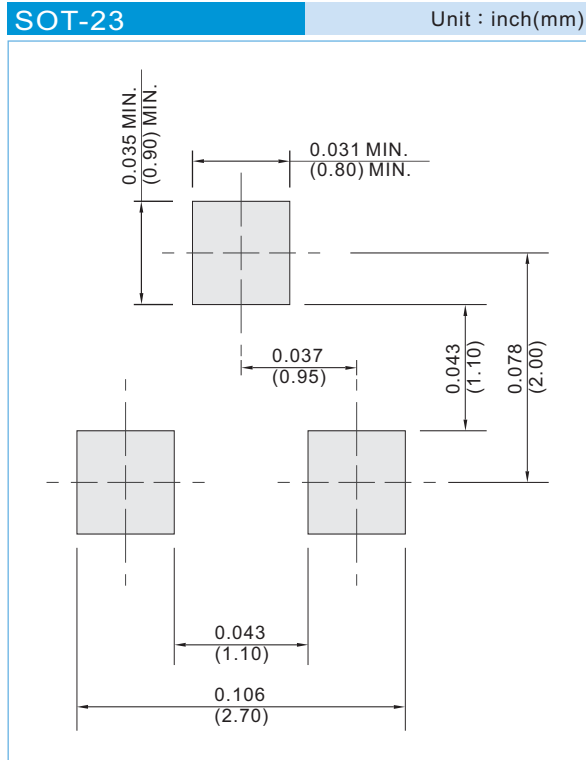


FIG. 4 FORWARD CURRENT DERATING



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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



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Part No\_packing code\_Version

BAT54-AU\_R1\_000A1

BAT54-AU\_R2\_000A1

For example :

**RB500V-40\_R2\_00001**



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



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