



BAT54!5I SERIES

SURFACE MOUNT SCHOTTKY BARRIER

VOLTAGE 30 Volts **CURRENT** 0.2 Amperes

FEATURES

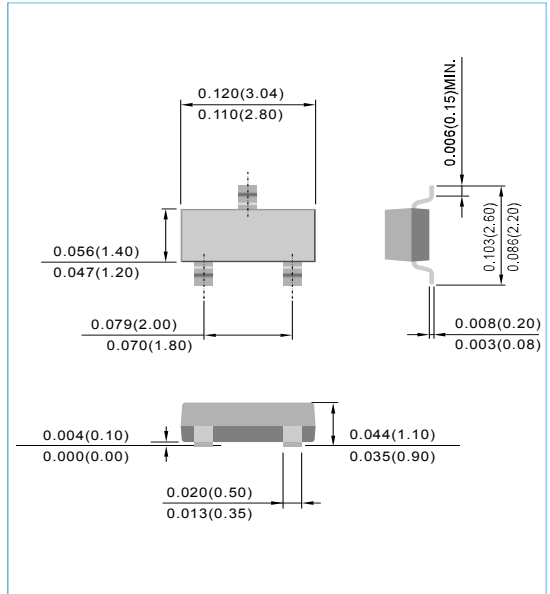
- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.
- Acquire quality system certificate : TS16949
- AEC-Q101 qualified
- Lead free in comply with EU RoHS 2011/65/EU directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

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

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 |
|--|-----------------------------------|-------------|--------------|----------------|-----------|-------|
| Marking code | - | L4 | L42 | L43 | L44 | - |
| 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, 1.0s (JEDEC method) | I _{FSM} | 0.6 | | | | A |
| Maximum Instantaneous Forward Voltage @ I _F =1mA @ I _F =100mA | V _F | 0.32 0.8 | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage@V _R =25V | I _R | 2.0 | | | | uA |
| 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 | - |

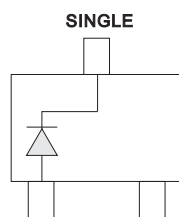


Fig.14

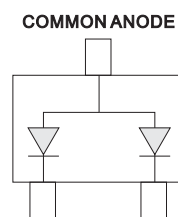


Fig.15

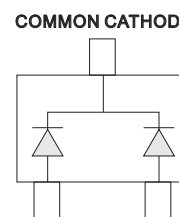


Fig.16

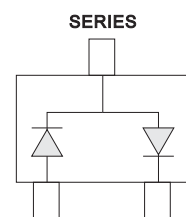


Fig.17



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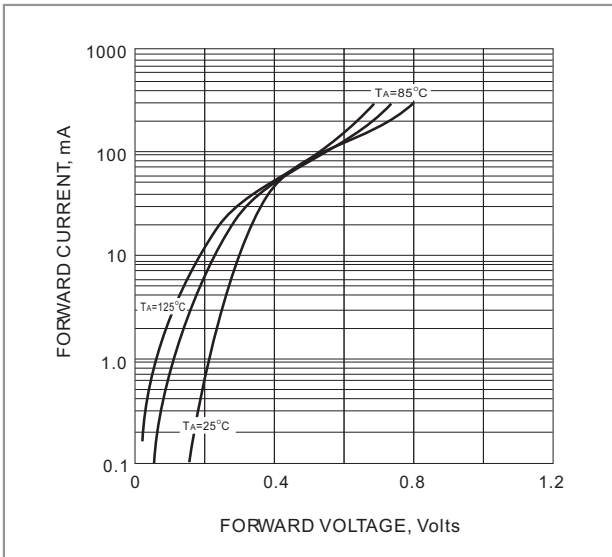


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

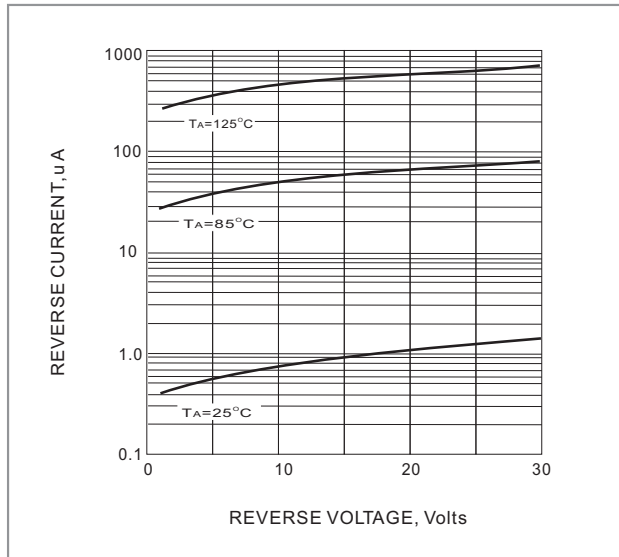


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

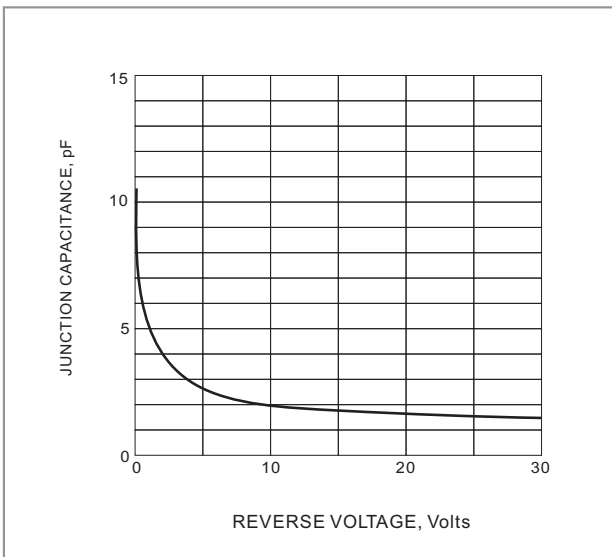


FIG. 3 TYPICAL JUNCTION CAPACITANCE

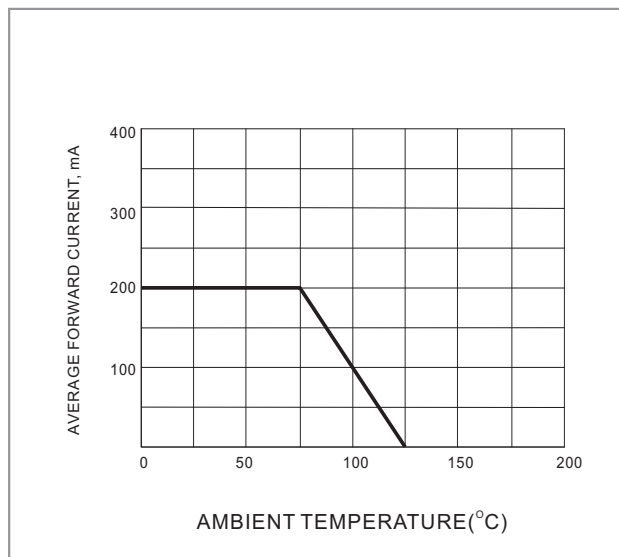
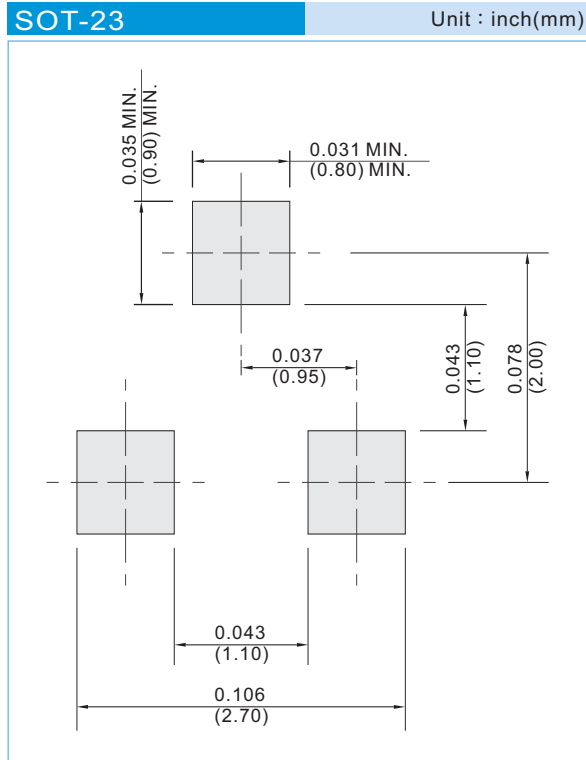


FIG. 4 FORWARD CURRENT DERATING



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



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