



BAT54TB SERIES

SURFACE MOUNT SCHOTTKY BARRIER

VOLTAGE 30 Volt **CURRENT** 0.2 Ampere

FEATURES

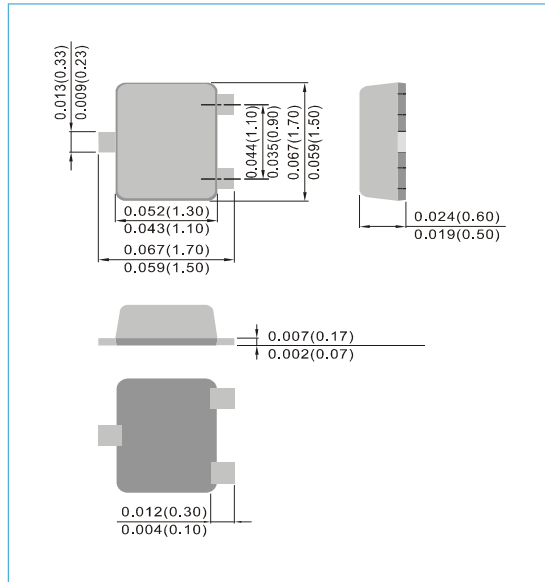
- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case: SOT-523, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.00007 ounces, 0.002 grams

SOT-523

Unit : inch(mm)

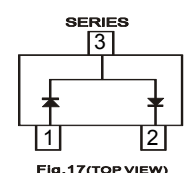
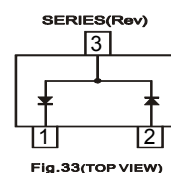
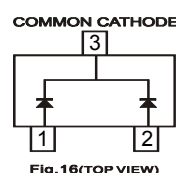
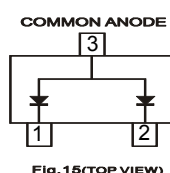
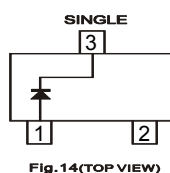


MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

| PARAMETER | SYMBOL | BAT54TB | BAT54ATB | BAT54CTB | BAT54RTB | BAT54STB | UNITS |
|--|-----------------------------------|-------------|--------------|----------------|--------------|----------|-------|
| Marking code | - | LV | LW | LX | LG | LY | - |
| Peak Repetitive Reverse Voltage | V _{RRM} | 30 | | | | | V |
| Average Forward Current | I _O | 0.2 | | | | | A |
| Peak Forward Surge Current, 1s | I _{FSM} | 0.6 | | | | | A |
| Instantaneous Forward Voltage at I _F =1mA at I _F =100mA | V _F | 0.32 0.6 | | | | | V |
| DC Reverse Current at Rated DC Blocking Voltage@VR=25V | I _R | 2 | | | | | μA |
| Typical Junction Capacitance at V _R =0V, f=1MHz | C _J | 10 | | | | | pF |
| Typical Thermal Resistance, Junction to Ambient (Note 1) | R _{θJA} | 833 | | | | | °C/ W |
| Operating Junction and Storage Temperature Range | T _J , T _{STG} | -55 to +125 | | | | | °C |
| Circuit Figure | - | Single | Common Anode | Common Cathode | Series (Rev) | Series | - |

Note :

1. Mounted on minimum pad layout.





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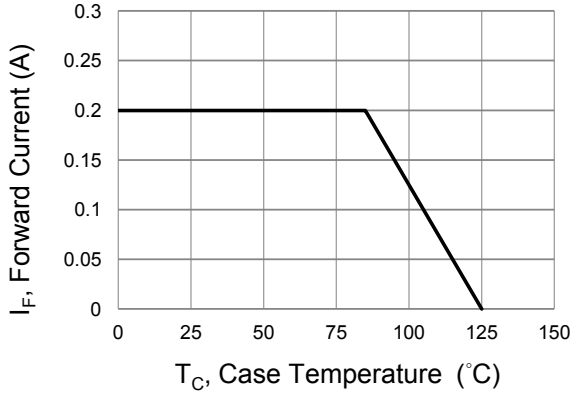


Fig.1 Forward Current Derating Curve

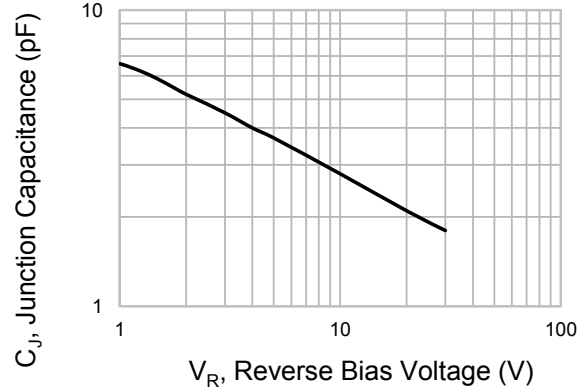


Fig.2 Typical Junction Capacitance

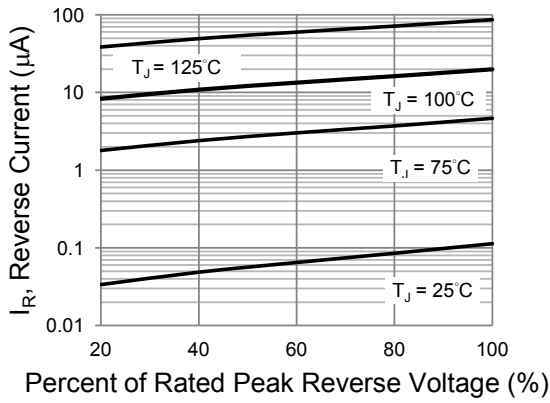


Fig.3 Typical Reverse Characteristics

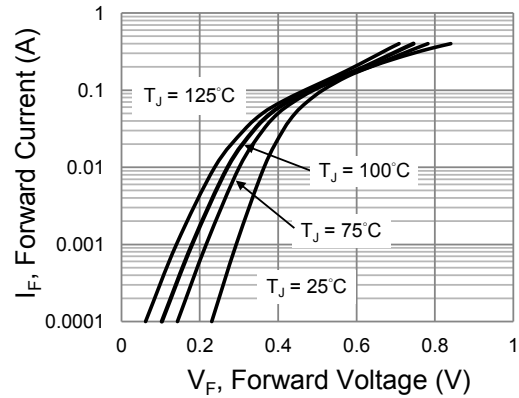


Fig.4 Typical Forward Characteristics

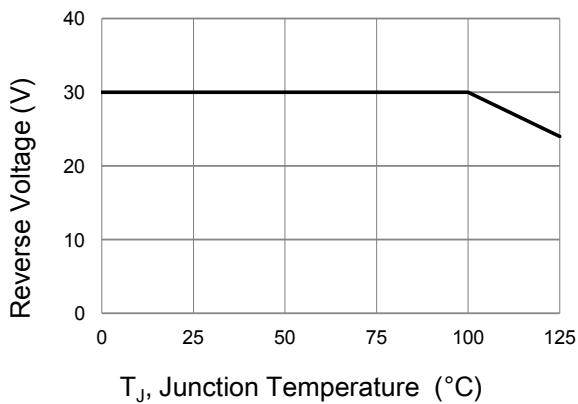
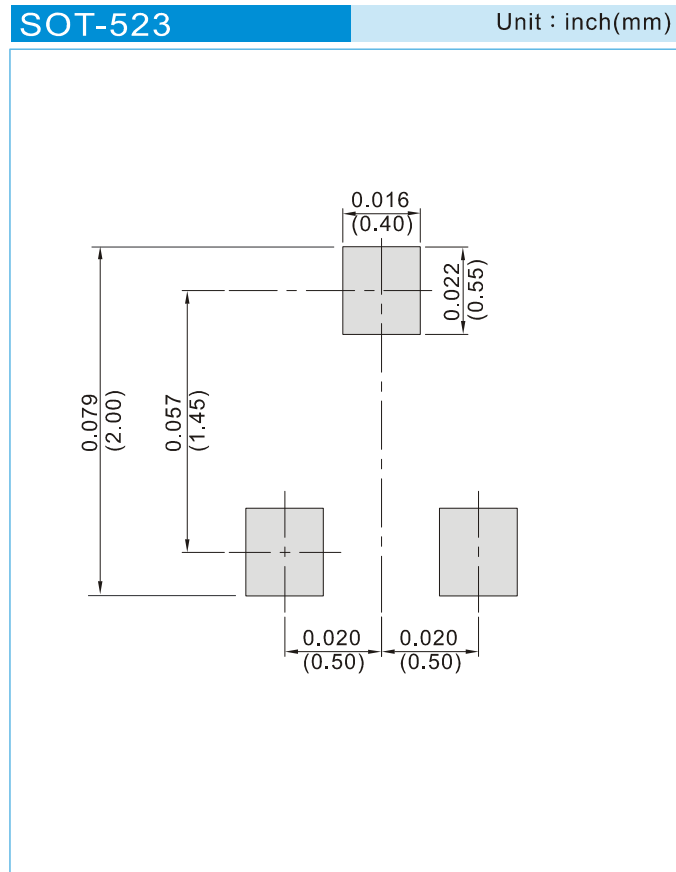


Fig.5 Operating Temperature Derating Curve



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 4K per 7" plastic Reel



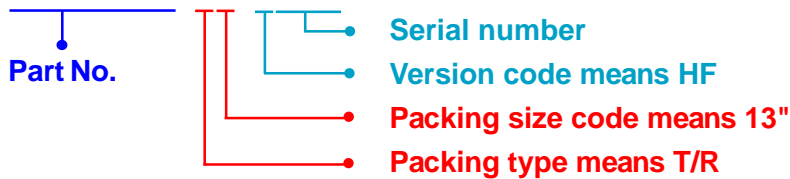
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Part No_packing code_Version

BAT54TB_R1_00001

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 | | | |