



# BAT54 SERIES

## SURFACE MOUNT SCHOTTKY BARRIER

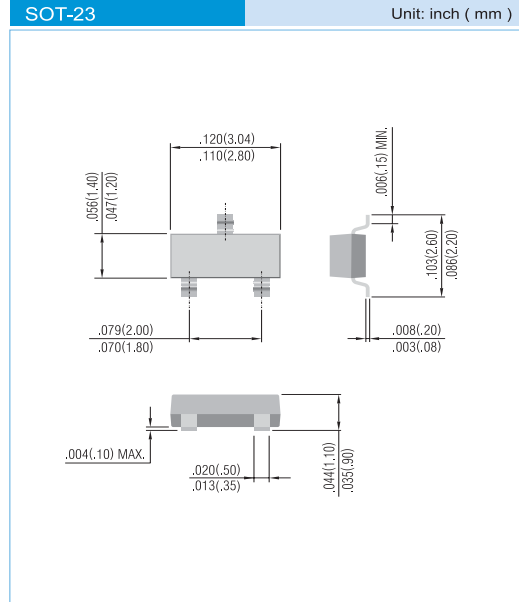
**VOLTAGE** 30 Volts    **CURRENT** 0.2 Amperes

### FEATURES

- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: SOT-23, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.008 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameter	Symbol	BAT54	BAT54A	BAT54C	BAT54S	Units
Marking code	-	L4	L42	L43	L44	-
Peak Repetitive Reverse Voltage	$V_{RRM}$	30				V
Maximum Average Forward Current at $T_a=75^\circ\text{C}$	$I_{F(AV)}$	0.2				A
Peak Forward Surge Current, 1.0s (JEDEC method)	$I_{FSM}$	0.6				A
Maximum Instantaneous Forward Voltage @ $I_F=1\text{mA}$ @ $I_F=100\text{mA}$	$V_F$	0.32 1.0				V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $V_R=25\text{V}$	$I_R$	2.0				$\mu\text{A}$
Junction Capacitance at $V_R=1\text{V}$	$C_J$	10				pF
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	500				$^\circ\text{C}/\text{W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 TO +125				$^\circ\text{C}$
Circuit Figure	-	Single	Common Anode	Common Cathode	Series	-

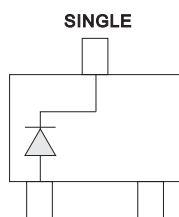


Fig.14

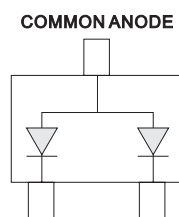


Fig.15

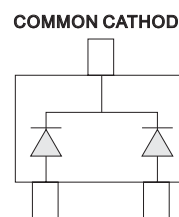


Fig.16

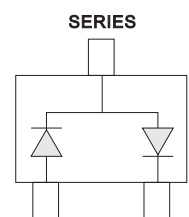


Fig.17



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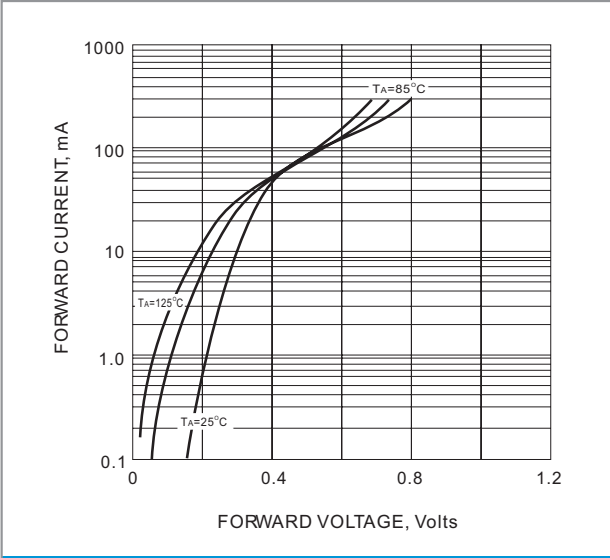


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

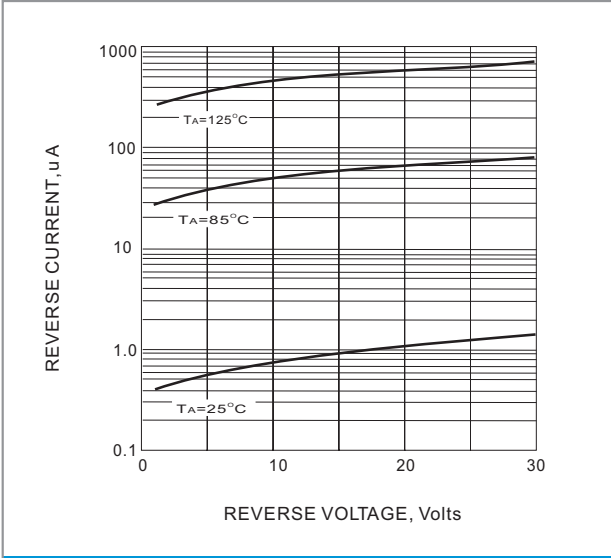


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

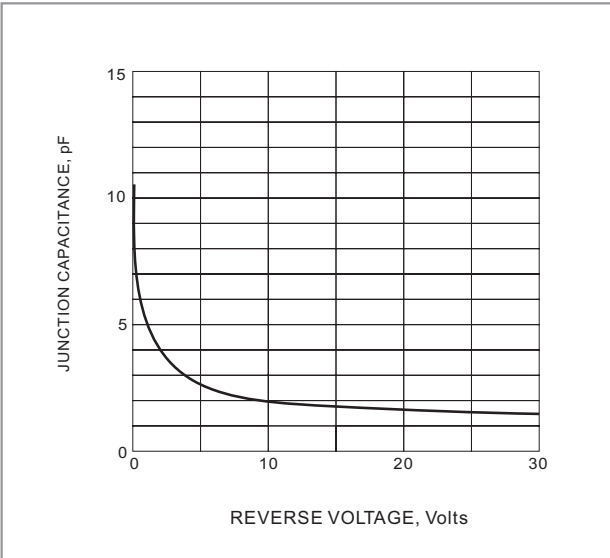


FIG. 3 TYPICAL JUNCTION CAPACITANCE

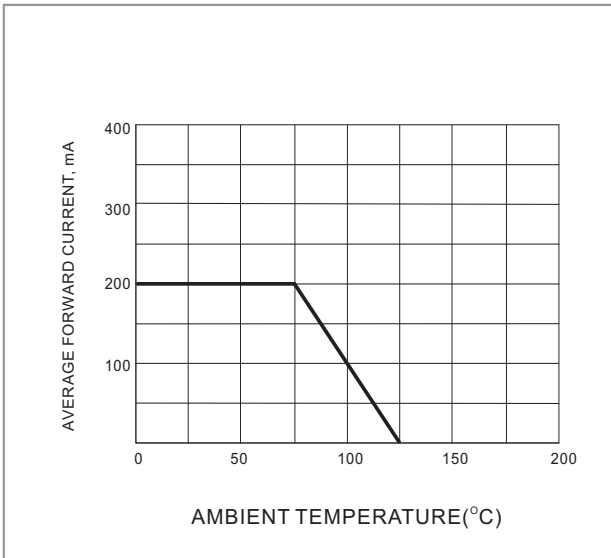
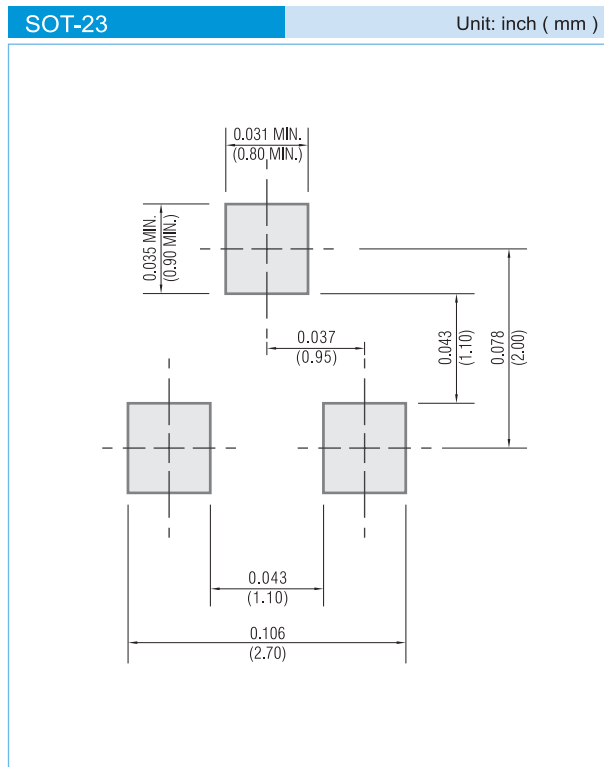


FIG. 4 FORWARD CURRENT DERATING



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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

### LEGAL STATEMENT

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