

BAT54 SERIES

SURFACE MOUNT SCHOTTKY BARRIER

VOLTAGE 30 Volts **CURRENT** 0.2 Amperes

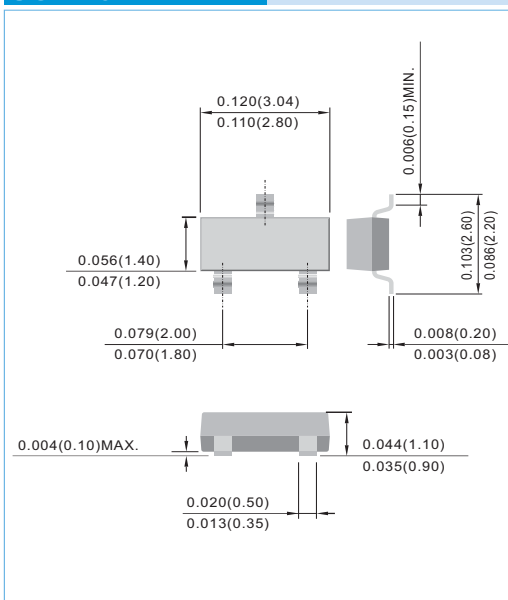
FEATURES

- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.

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	BAT54A	BAT54C	BAT54S	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	-

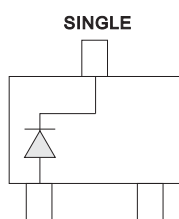


Fig.14

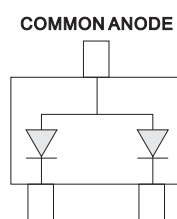


Fig.15

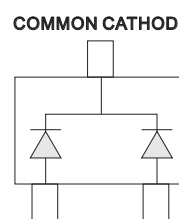


Fig.16

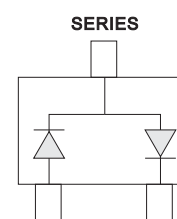


Fig.17

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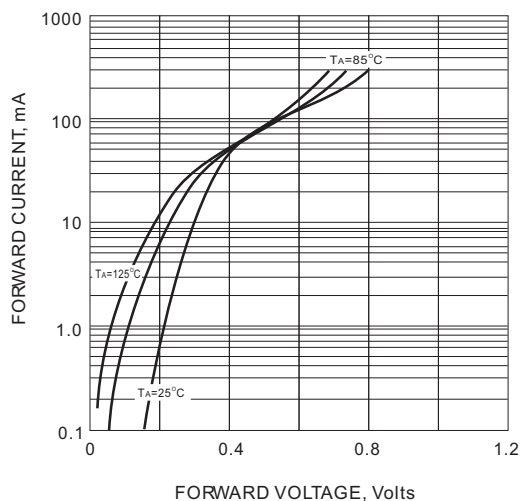


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

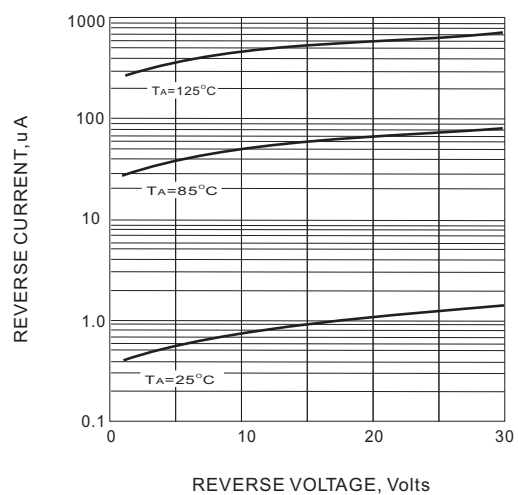


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

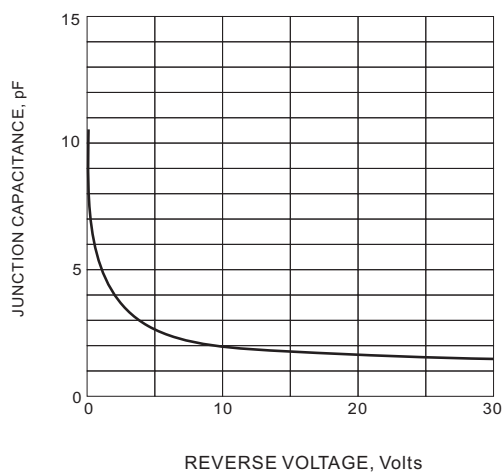


FIG. 3 TYPICAL JUNCTION CAPACITANCE

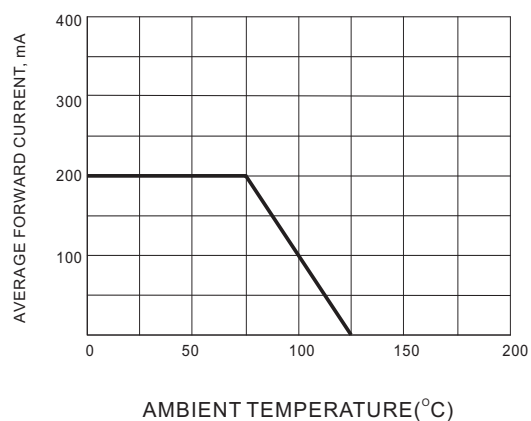
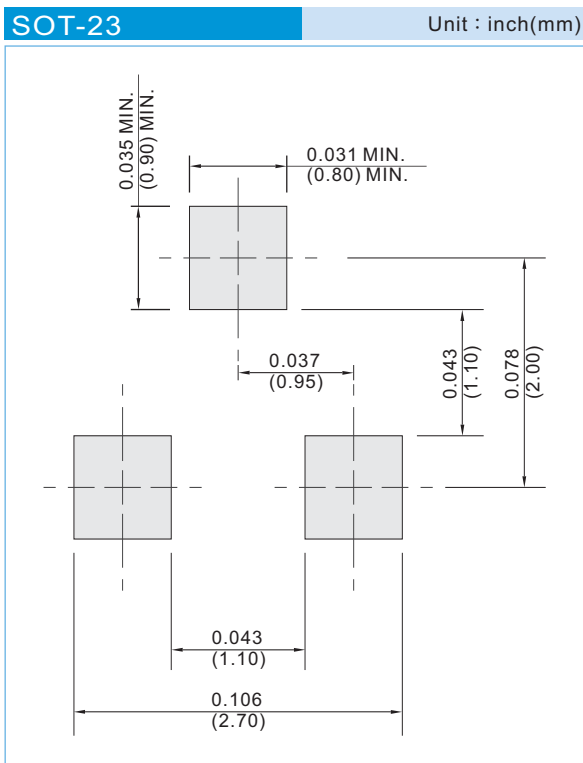


FIG. 4 FORWARD CURRENT DERATING

BAT54 SERIES

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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