

# BAT54TB SERIES

## SURFACE MOUNT SCHOTTKY BARRIER

**VOLTAGE** 30 Volt **CURRENT** 0.2 Ampere

### FEATURES

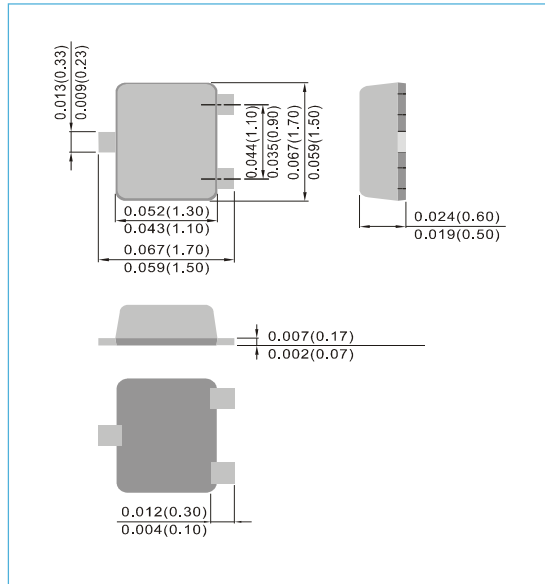
- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### 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)

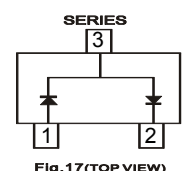
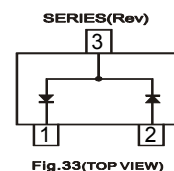
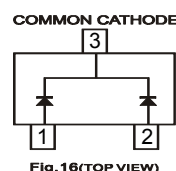
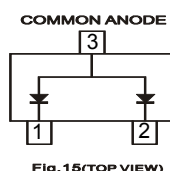
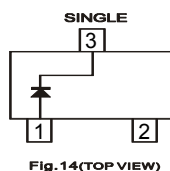


## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

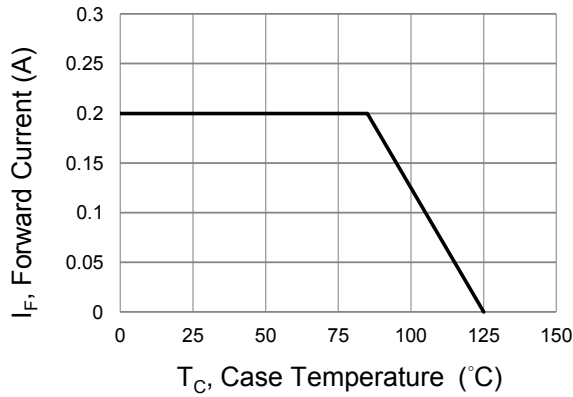
PARAMETER	SYMBOL	BAT54TB	BAT54ATB	BAT54CTB	BAT54RTB	BAT54STB	UNITS
Marking code	-	LV	LW	LX	LG	LY	-
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	30					V
Average Forward Current	I <sub>O</sub>	0.2					A
Peak Forward Surge Current, 1s	I <sub>FSM</sub>	0.6					A
Instantaneous Forward Voltage at I <sub>F</sub> =1mA at I <sub>F</sub> =100mA	V <sub>F</sub>	0.32 0.6					V
DC Reverse Current at Rated DC Blocking Voltage@VR=25V	I <sub>R</sub>	2					μA
Typical Junction Capacitance at V <sub>R</sub> =0V, f=1MHz	C <sub>J</sub>	10					pF
Typical Thermal Resistance, Junction to Ambient (Note 1)	R <sub>θJA</sub>	833					°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 (Rev)	Series	-

Note :

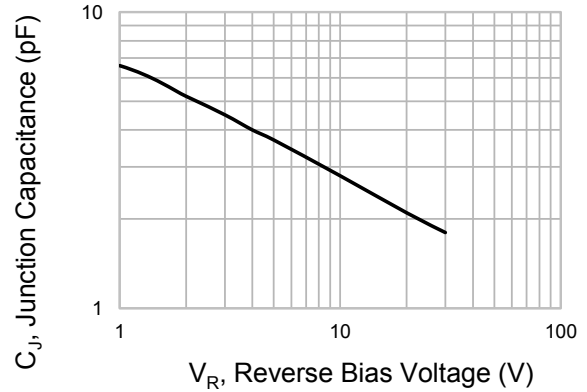
1. Mounted on minimum pad layout.



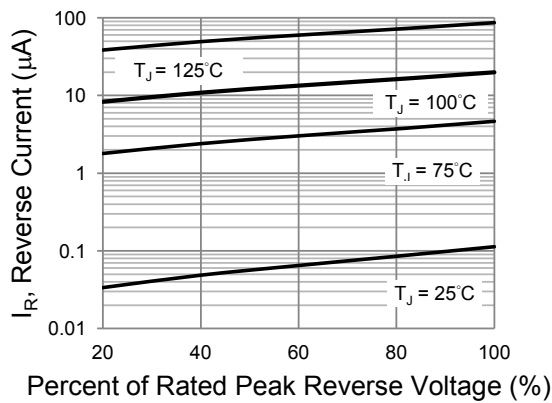
## BAT54TB SERIES



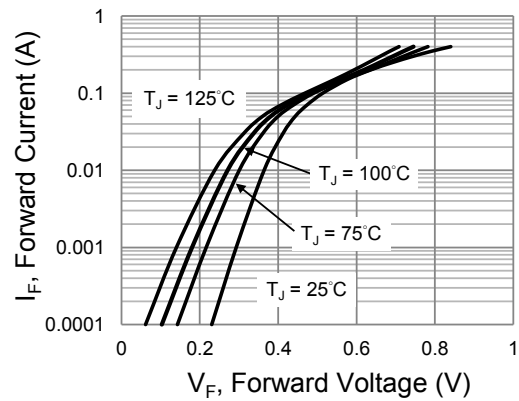
**Fig.1 Forward Current Derating Curve**



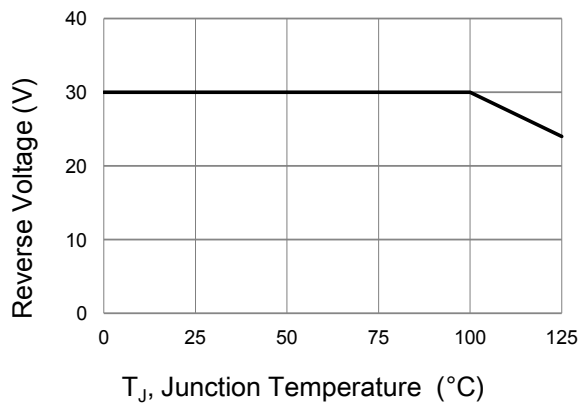
**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



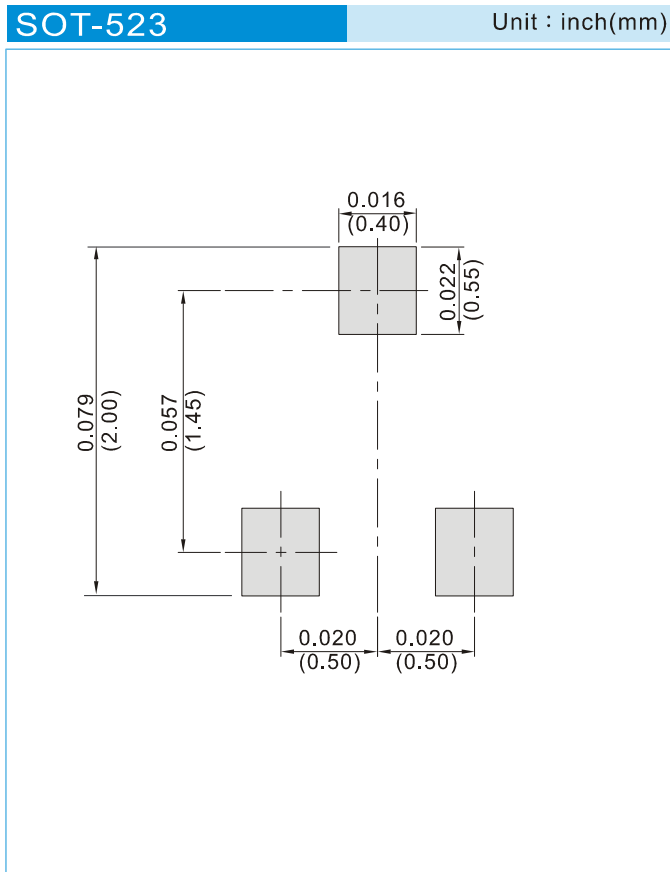
**Fig.4 Typical Forward Characteristics**



**Fig.5 Operating Temperature Derating Curve**

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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

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

## BAT54TB SERIES

Part No\_packing code\_Version

BAT54TB\_R1\_00001

For example :

RB500V-40\_R2\_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXX		
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)	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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