



# BAT54TS

## SURFACE MOUNT SCHOTTKY BARRIER

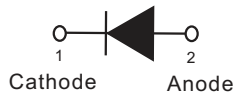
**VOLTAGE** 30 Volt **CURRENT** 0.20 Ampere

### FEATURES

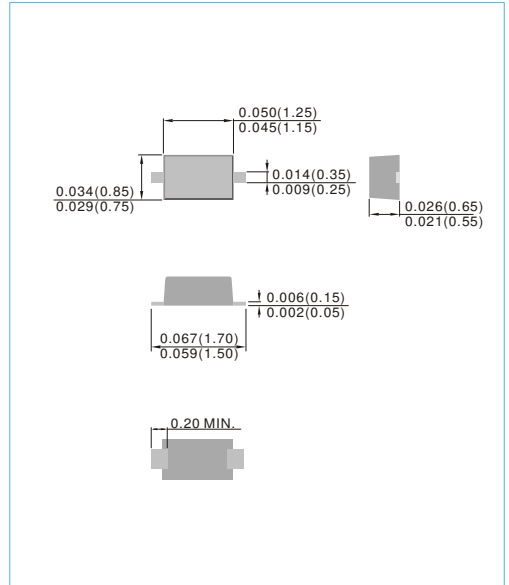
- Low turn-on voltage
- Fast switching
- PN junction guard ring for transient and ESD protection
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: SOD-523, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0001 ounces, 0.0014 grams
- Polarity: Color band denotes cathode end
- Marking: L4



### SOD-523 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	Value	Units
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, 1s single half sine-wave superimposed on rated load	$I_{FSM}$	0.6	A
Maximum Instantaneous Forward Voltage @ $I_F=1\text{mA}$ @ $I_F=100\text{mA}$	$V_F$	0.32 0.6	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $V_R=25\text{V}$	$I_R$	2	$\mu\text{A}$
Junction Capacitance at $V_R=1\text{V}$	$C_J$	10	pF
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	667	$^\circ\text{C}/\text{W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +125	$^\circ\text{C}$



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## TYPICAL CHARACTERISTIC CURVES

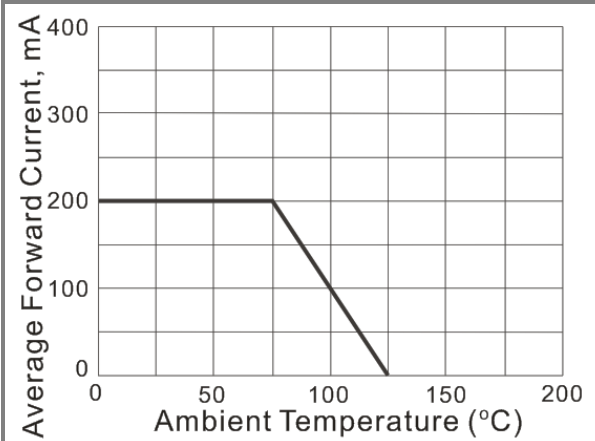


Fig.1 Forward Current Derating Curve

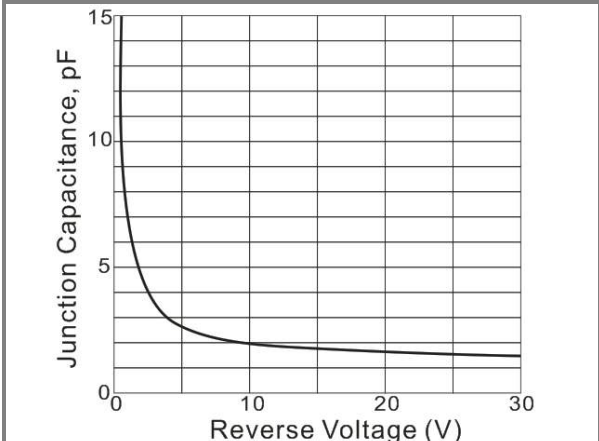


Fig.2 Typical Junction Capacitance

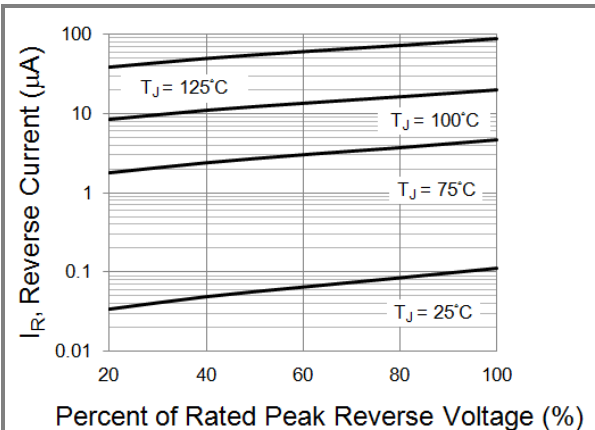


Fig.3 Typical Reverse Characteristics

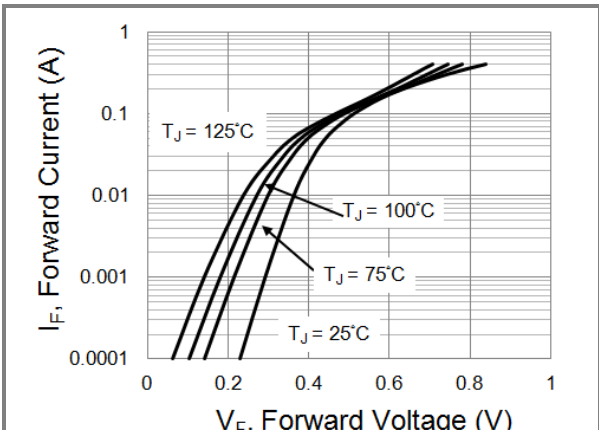


Fig.4 Typical Forward Characteristics

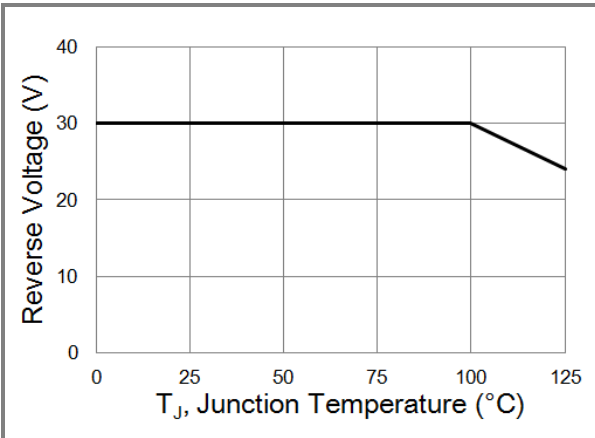


Fig.5 Operating Temperature Derating Curve

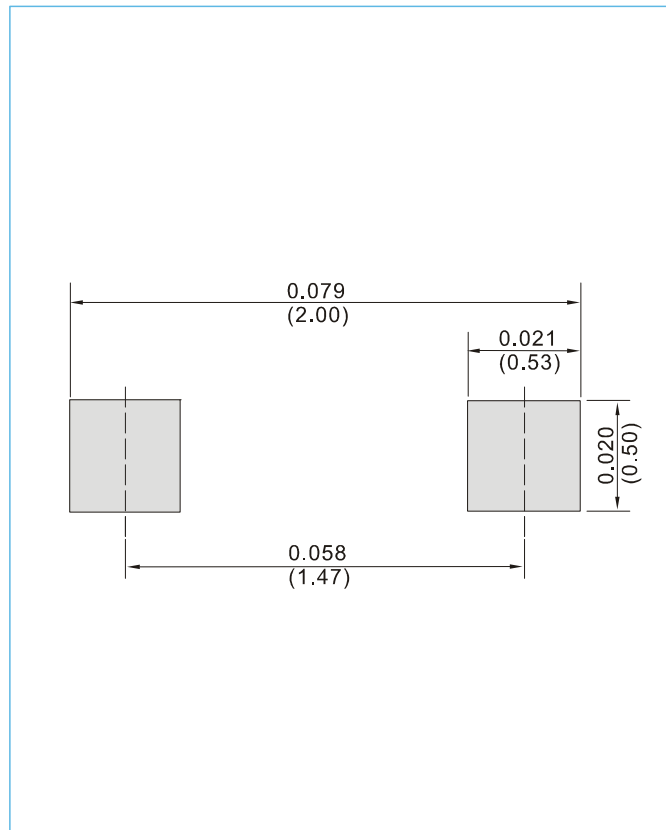


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## MOUNTING PAD LAYOUT

SOD-523

Unit : inch(mm)



## ORDER INFORMATION

- Packing information  
T/R - 12K per 13" plastic Reel  
T/R - 5K per 7" plastic Reel



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## Part No\_packing code\_Version

BAT54TS\_R1\_00001

BAT54TS\_R2\_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 <b>XX</b>				Version Code <b>XXXXX</b>		
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)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			



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