



# BAT54WS

## SURFACE MOUNT SCHOTTKY BARRIER

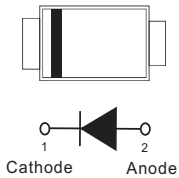
**VOLTAGE** 30 Volt **CURRENT** 0.2 Ampere

### FEATURES

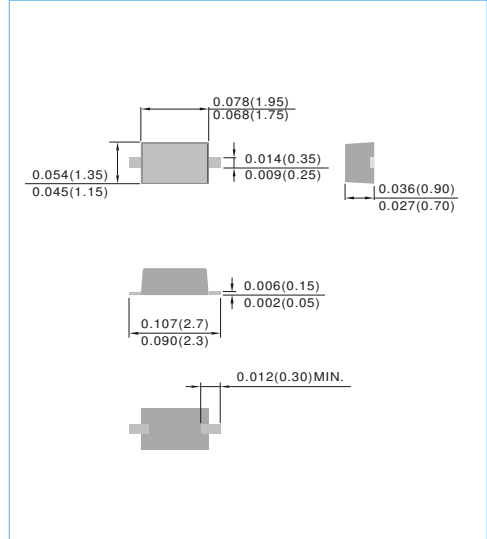
- Low turn-on voltage
- Fast switching
- PN junction guard ring for transient and ESD protection.
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: SOD-323, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0001 ounces, 0.0041 grams
- Polarity: Color band denotes cathode end



**SOD-323** Unit : inch(mm)



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

For capacitive load, derate current by 20%.

Parameter	Symbol	Value	Units
Marking code		L4	
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	30	V
Maximum Average Forward Current at T <sub>A</sub> =75°C	I <sub>F(AV)</sub>	0.2	A
Peak Forward Surge Current, 1s	I <sub>FSM</sub>	1	A
Maximum Instantaneous Forward Voltage @ IF=1mA @ IF=100mA	V <sub>F</sub>	0.32 0.6	V
Maximum DC Reverse Current at Rated DC Blocking Voltage@V <sub>R</sub> =25V	I <sub>R</sub>	2	μA
Junction Capacitance at V <sub>R</sub> =1V	C <sub>J</sub>	10	pF
Typical Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	500	°C/ W
Operating Junction Temperature and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +125	°C



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## TYPICAL CHARACTERISTIC CURVES

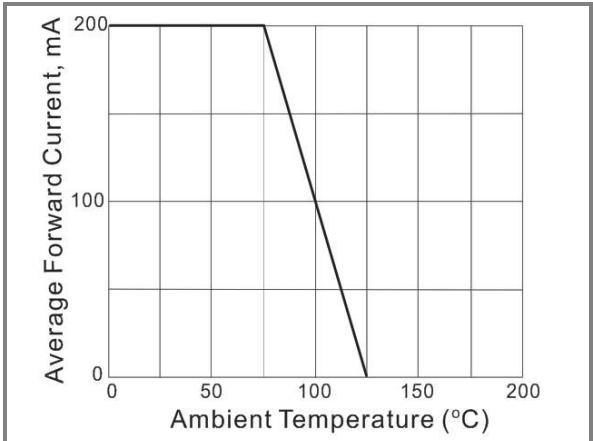


Fig.1 Forward Current Derating Curve

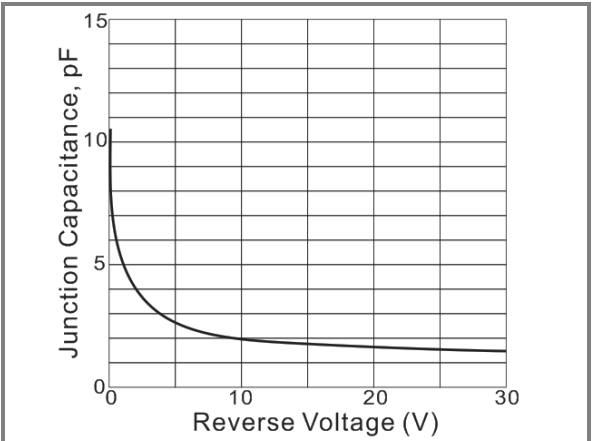


Fig.2 Typical Junction Capacitance

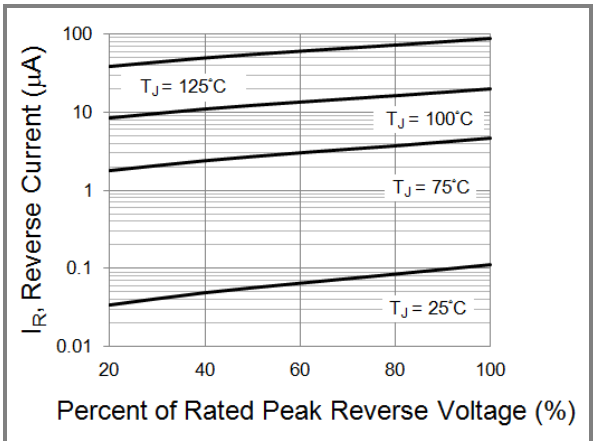


Fig.3 Typical Reverse Characteristics

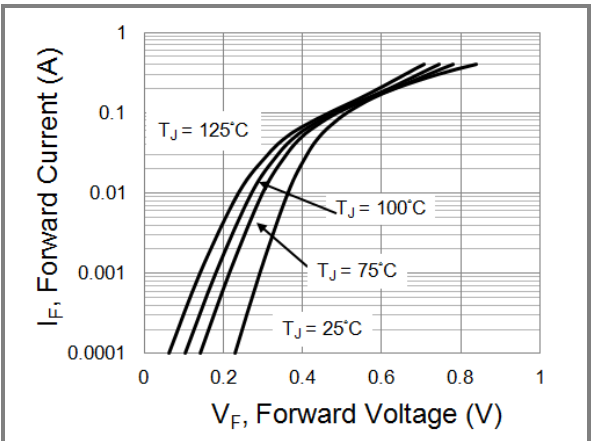


Fig.4 Typical Forward Characteristics

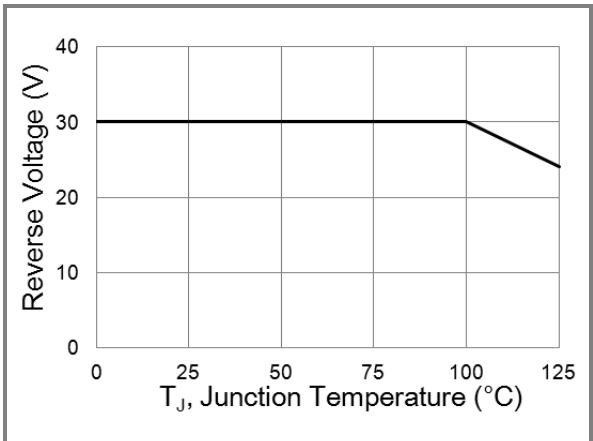


Fig.5 Operating Temperature Derating Curve

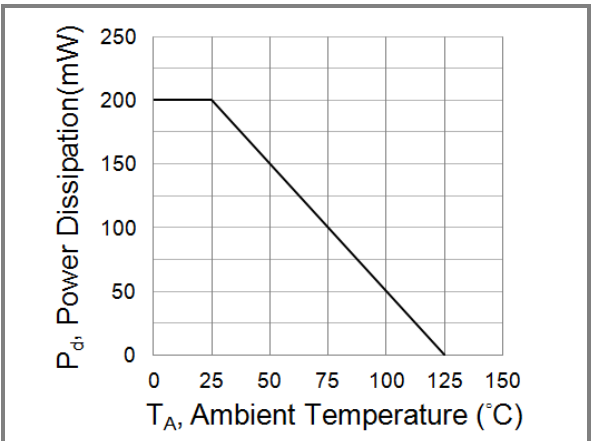
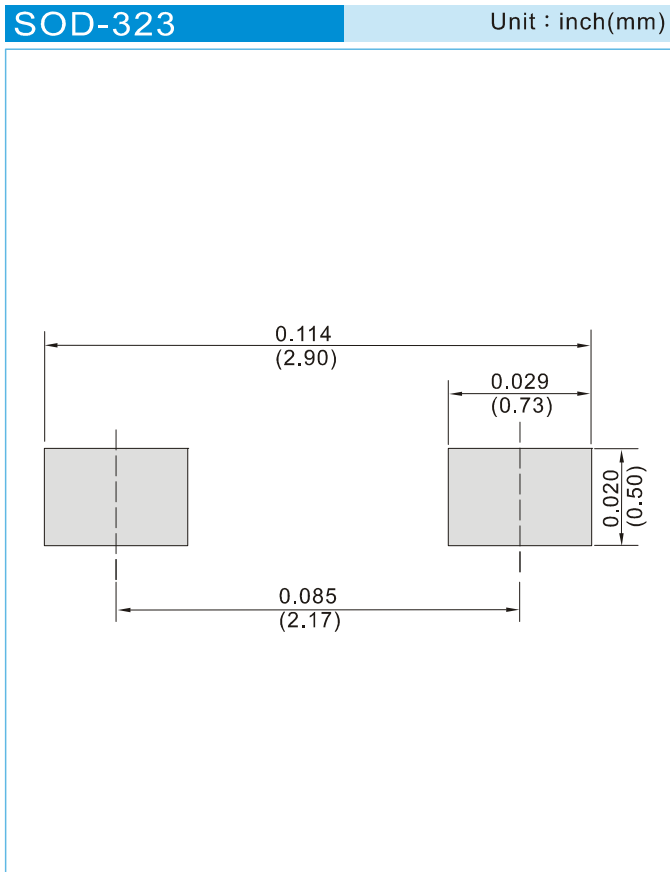


Fig.6 Power Derating Curve



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

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



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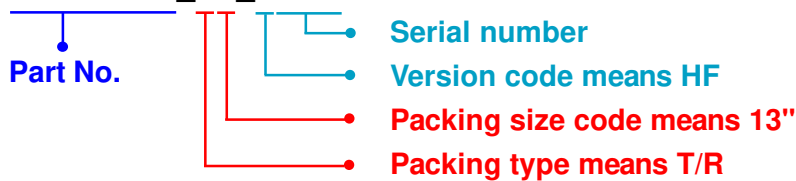
## Part No\_packing code\_Version

BAT54WS\_R1\_00001

BAT54WS\_R2\_00001

For example :

**RB500V-40** **R2** **00001**



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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