



# BAT54W 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.
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

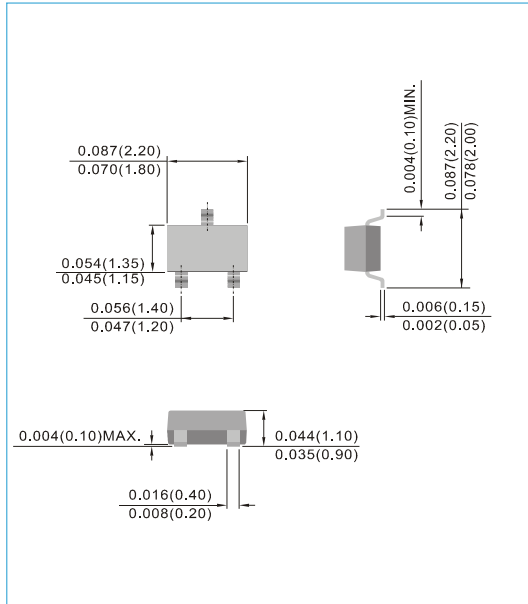
Case: SOT-323, Plastic

Terminals:Solderable per MIL-STD-750,Method2026

Approx. Weight: 0.0002 ounces, 0.005 grams

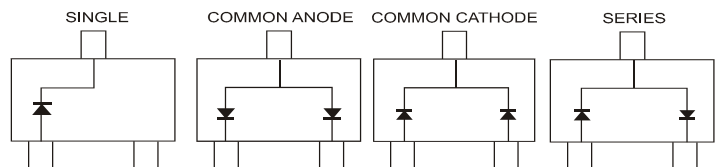
### SOT-323

Unit : inch(mm)



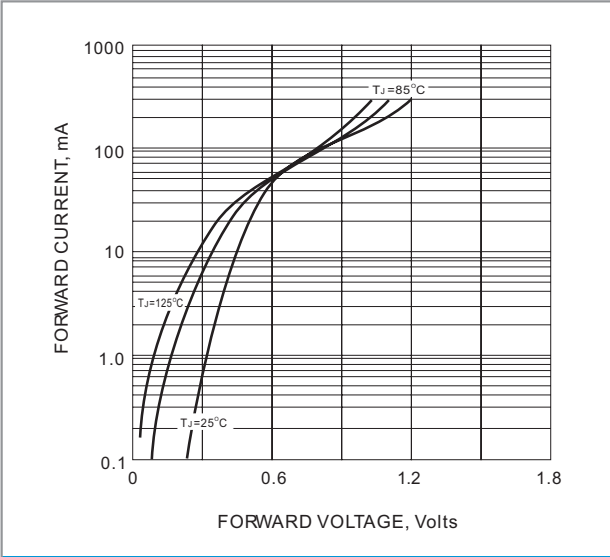
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise noted)

PARAMETER	SYMBOL	BAT54W	BAT54AW	BAT54CW	BAT54SW	UNITS
Marking Code	-	L4	L42	L43	L44	-
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	30				V
Maximum Average Forward Current at Ta=75°C	I <sub>F(AV)</sub>	0.2				A
Peak Forward Surge Current, 1.0s (JEDEC method)	I <sub>FSM</sub>	0.6				A
Maximum Instantaneous Forward Voltage I <sub>F</sub> =1mA I <sub>F</sub> =100mA	V <sub>F</sub>	0.32 1.00				V
Power Dissipation	P <sub>D</sub>	200				mW
Maximum DC Reverse Current at Rated DC Blocking Voltage@VR=25V	I <sub>R</sub>	2.0				uA
Junction Capacitance :at VR=1V	C <sub>J</sub>	10				pF
Thermal Resistance, Junction to Ambient	R <sub>QJA</sub>	635				°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	

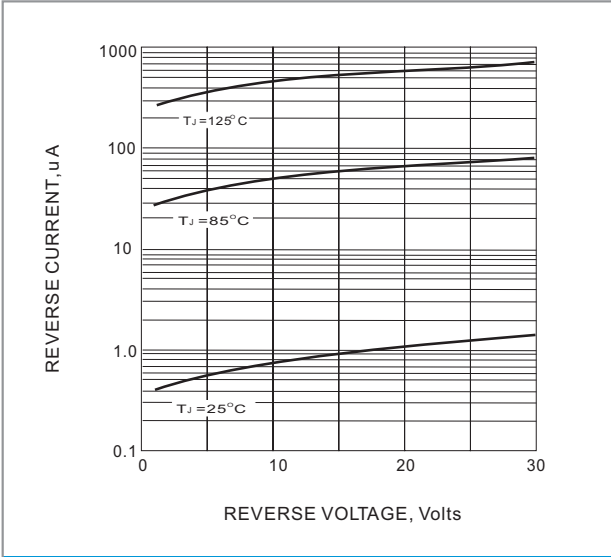




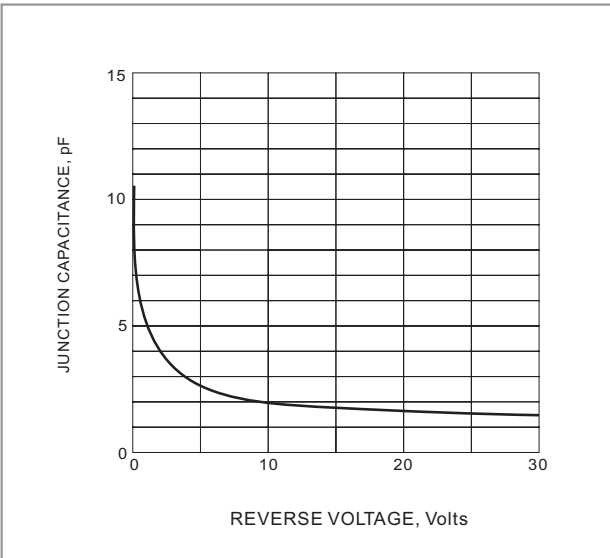
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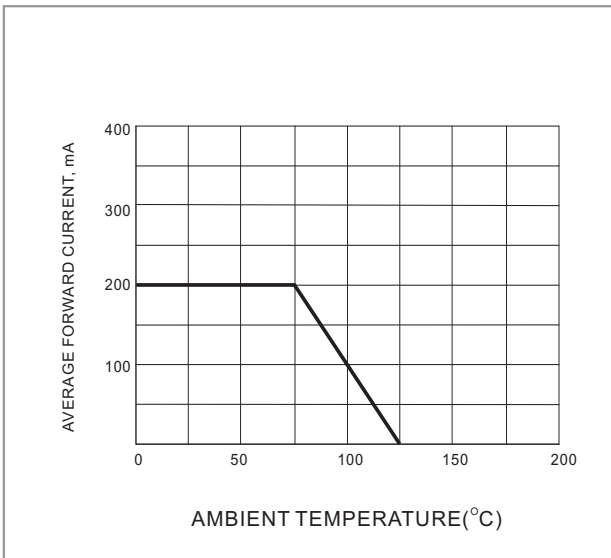
**FIG. 1-TYPICAL FORWARD CHARACTERISTIC**



**FIG. 2-TYPICAL REVERSE CHARACTERISTICS**



**FIG. 3 TYPICAL JUNCTION CAPACITANCE**

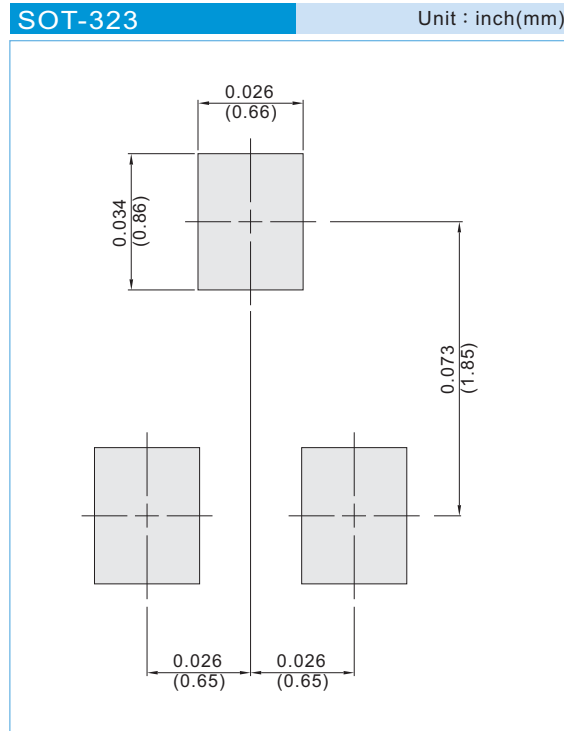


**FIG. 4 FORWARD CURRENT DERATING**



# BAT54W 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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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
T/B	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
T/R	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
B/P	<b>B</b>	13"	<b>2</b>			
T/P	<b>T</b>	26mm	<b>X</b>			
TRR	<b>S</b>	52mm	<b>Y</b>			
TRL	<b>L</b>	PBCU	<b>U</b>			
FORMING	<b>F</b>	PBCD	<b>D</b>			

**Part No\_packing code\_Version**

BAT54W\_R1\_00001

BAT54W\_R2\_00001