

# BAT54W SERIES

## SURFACE MOUNT SCHOTTKY BARRIER

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

### FEATURES

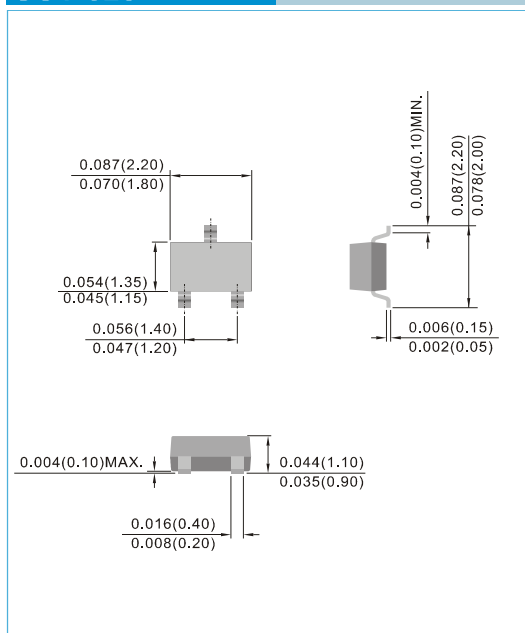
- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: SOT-323, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0002 ounces, 0.005 grams

### SOT-323

Unit : inch(mm)



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

PARAMETER	SYMBOL	BAT54W	BAT54AW	BAT54CW	BAT54SW	UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	30				V
Maximum Average Forward Current	I <sub>F(AV)</sub>	0.2				A
Peak Forward Surge Current, 1s	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 0.6				V
Power Dissipation	P <sub>D</sub>	200				mW
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
Thermal Resistance, Junction to Ambient	R <sub>θJA</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	

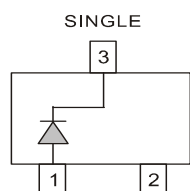


FIG.14(TOP VIEW)

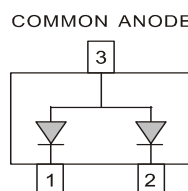


FIG.15(TOP VIEW)

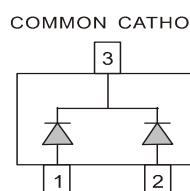


FIG.16(TOP VIEW)

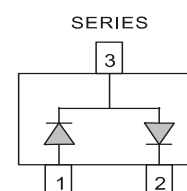


FIG.17(TOP VIEW)

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## TYPICAL CHARACTERISTIC CURVES

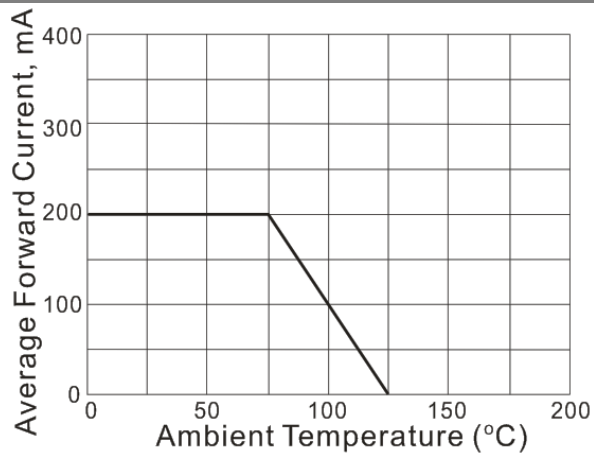


Fig.1 Forward Current Derating Curve

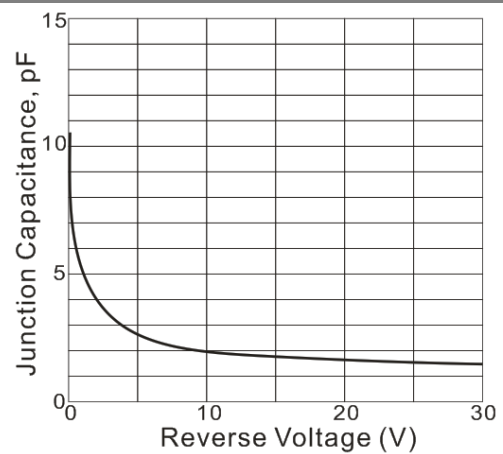


Fig.2 Typical Junction Capacitance

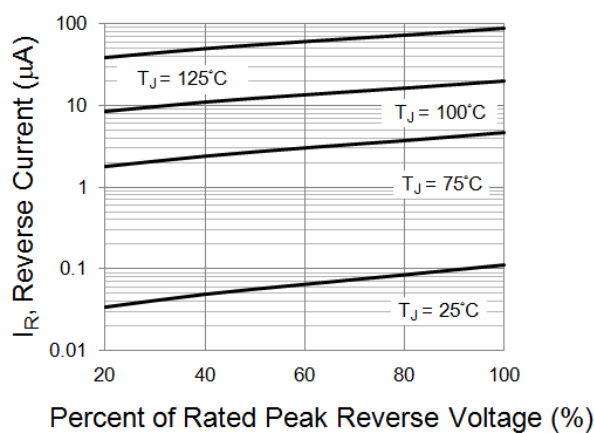


Fig.3 Typical Reverse Characteristics

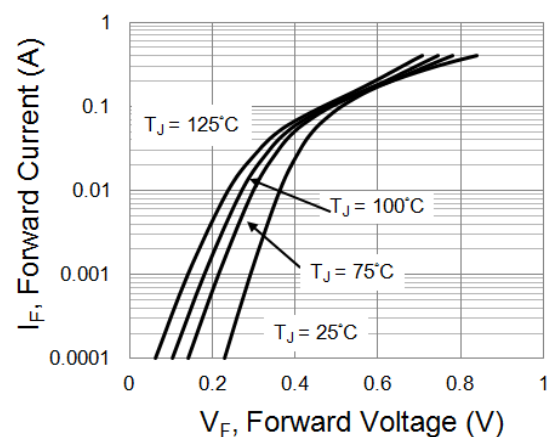


Fig.4 Typical Forward Characteristics

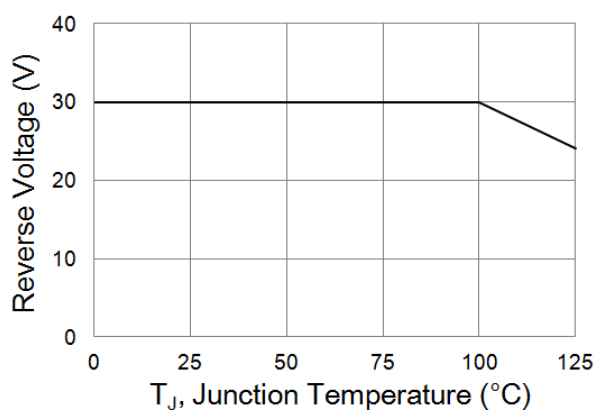


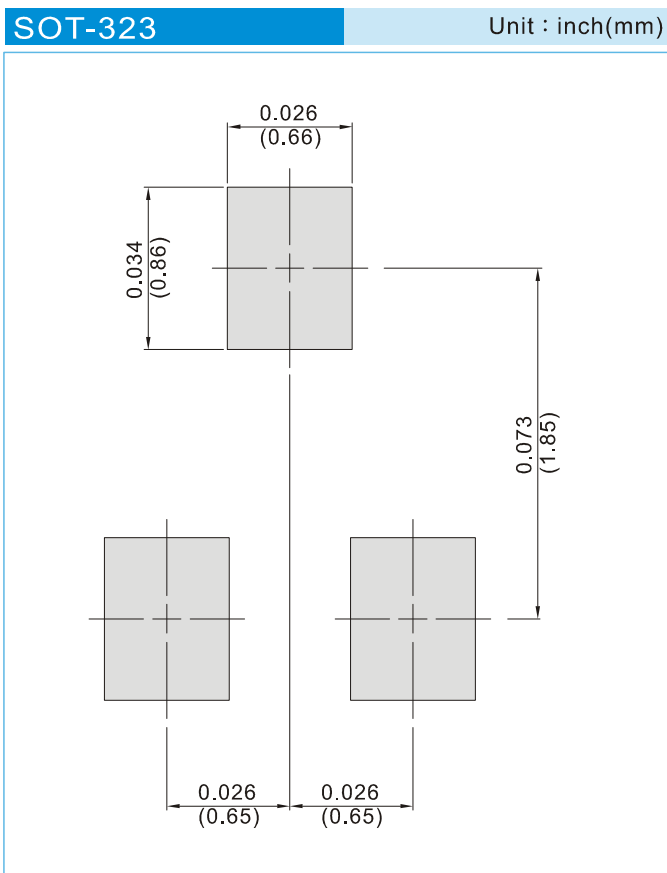
Fig.5 Operating Temperature Derating Curve

# BAT54W SERIES

## PART NO PACKING CODE VERSION

Part No Packing Code	Package Type	Packing Type	Marking	Version
BAT54W_R1_00001	SOT-323	3K pcs / 7" reel	L4	Halogen free
BAT54W_R2_00001	SOT-323	12K pcs / 13" reel	L4	Halogen free
BAT54AW_R1_00001	SOT-323	3K pcs / 7" reel	L42	Halogen free
BAT54AW_R2_00001	SOT-323	12K pcs / 13" reel	L42	Halogen free
BAT54CW_R1_00001	SOT-323	3K pcs / 7" reel	L43	Halogen free
BAT54CW_R2_00001	SOT-323	12K pcs / 13" reel	L43	Halogen free
BAT54SW_R1_00001	SOT-323	3K pcs / 7" reel	L44	Halogen free
BAT54SW_R2_00001	SOT-323	12K pcs / 13" reel	L44	Halogen free

## MOUNTING PAD LAYOUT





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