



# DATA SHEET

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## BAT54W/AW/CW/SW

### SURFACE MOUNT SCHOTTKY BARRIER

**VOLTAGE** 30 Volts    **CURRENT** 0.2 Amperes

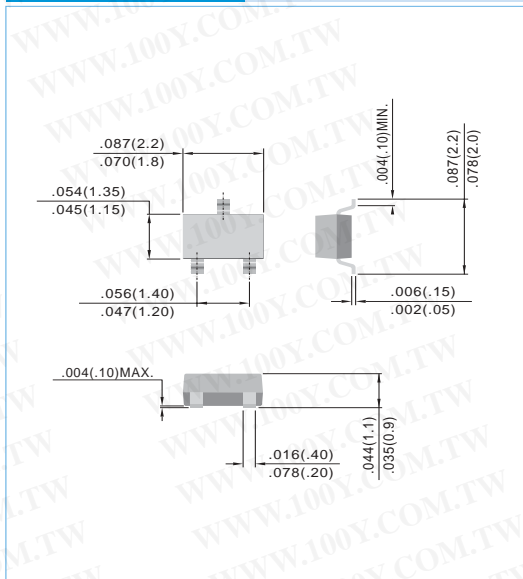
**SOT-323**    Unit: inch (mm)

#### FEATURES

- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.
- Both normal and Pb free product are available :
  - Normal : 80~95% Sn, 5~20% Pb
  - Pb free: 98.5% Sn above

#### MECHANICAL DATA

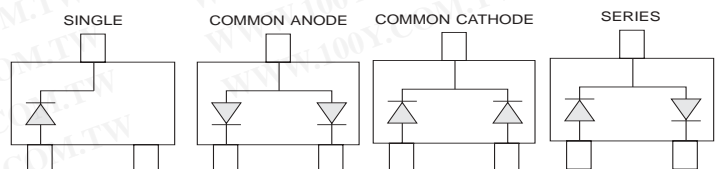
Case: SOT-323, Plastic  
 Terminals: Solderable per MIL-STD-202, Method 208  
 Approx. Weight: 0.0052 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. For capacitive load, derate current by 20%.

Parameter	Symbol	BAT54W	BAT54AW	BAT54CW	BAT54SW	Units
Marking code		L4	L42	L43	L44	
Peak Repetitive Reverse Voltage	$V_{RRM}$	30				V
Maximum Average Forward Current at $T_a=75^\circ\text{C}$	$I_F$	0.2				A
Peak Forward Surge Current, 1.0s (JEDEC method)	$I_{FSM}$	0.6				A
Maximum Instantaneous Forward Voltage @ $I_F=1\text{mA}$ @ $I_F=100\text{mA}$	$V_F$	0.32 1.0				V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $V_R=25\text{V}$	$I_R$	2.0				$\mu\text{A}$
Junction Capacitance at $V_R=1\text{V}$	$C_j$	10				pF
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	635				$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 TO +125				$^\circ\text{C}$
Circuit Figure		Single	Common Anode	Common Cathode	Series	



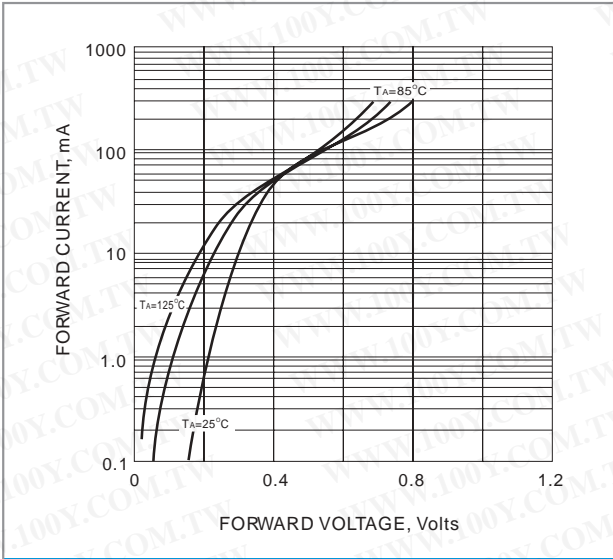


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

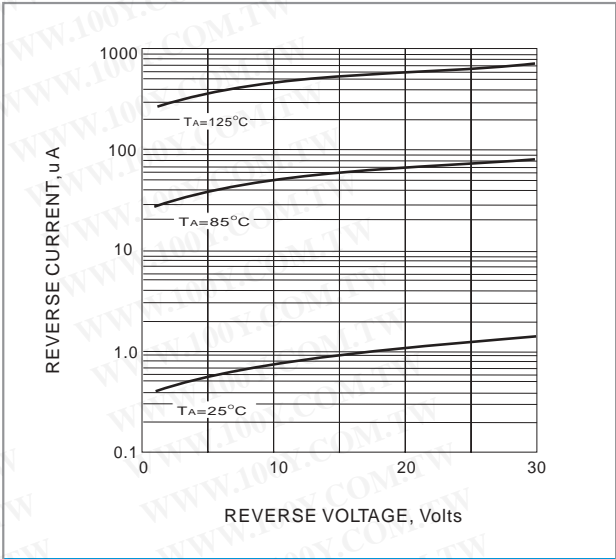


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

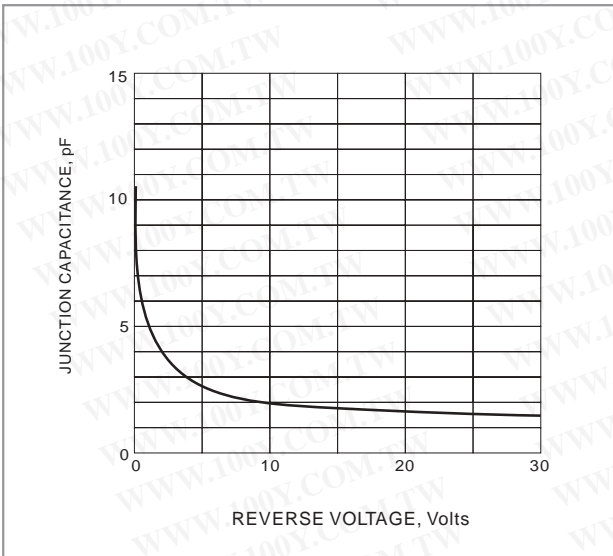


FIG. 3 TYPICAL JUNCTION CAPACITANCE

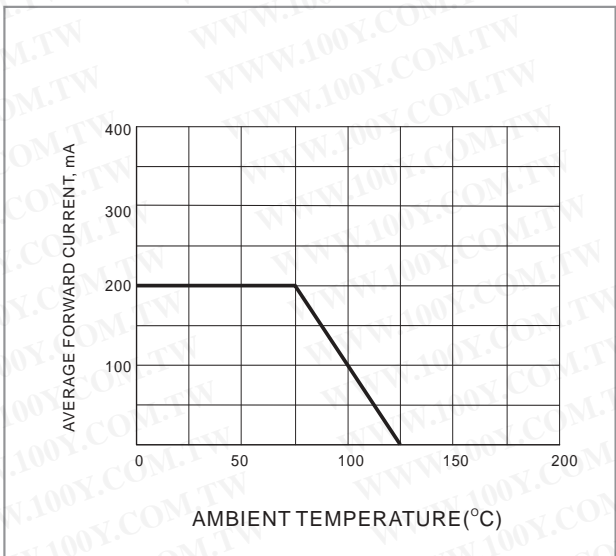


FIG. 4 FORWARD CURRENT DERATING