



# DATA SHEET

## BAT54WS

### SURFACE MOUNT SCHOTTKY BARRIER

**VOLTAGE** 30 Volts

**CURRENT** 0.2 Amperes

SOD-323

Unit: inch (mm)

#### FEATURES

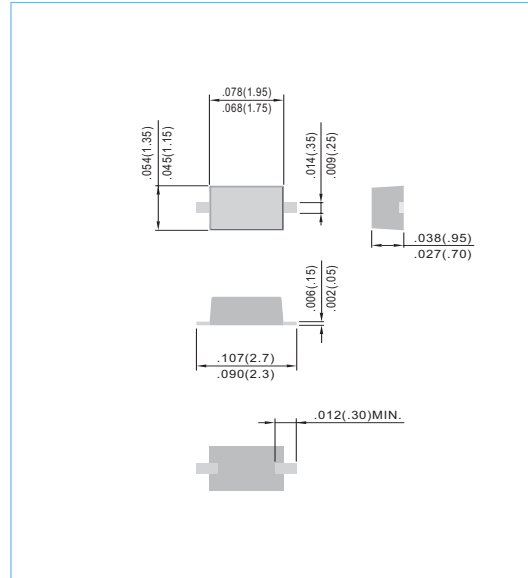
- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.
- Both normal and Pb free product are available :
  - Normal : 80~95% Sn, 5~20% Pb
  - Pb free: 98.5% Sn above

#### MECHANICAL DATA

Case: SOD-323, Plastic

Terminals: Solderable per MIL-STD-202, Method 208

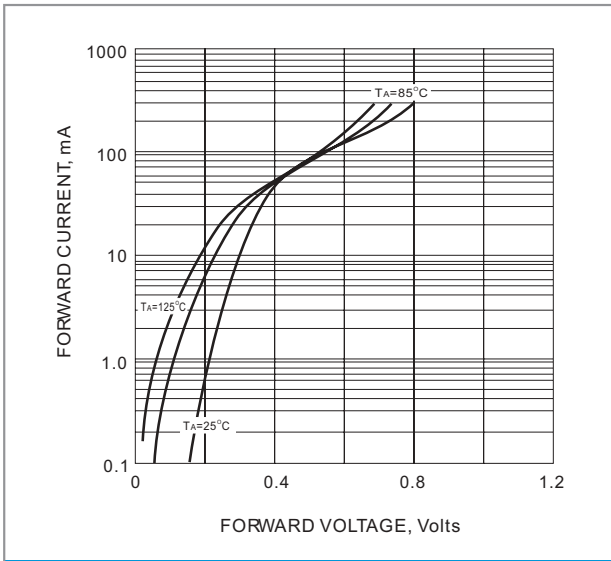
Approx. Weight: 0.008 gram



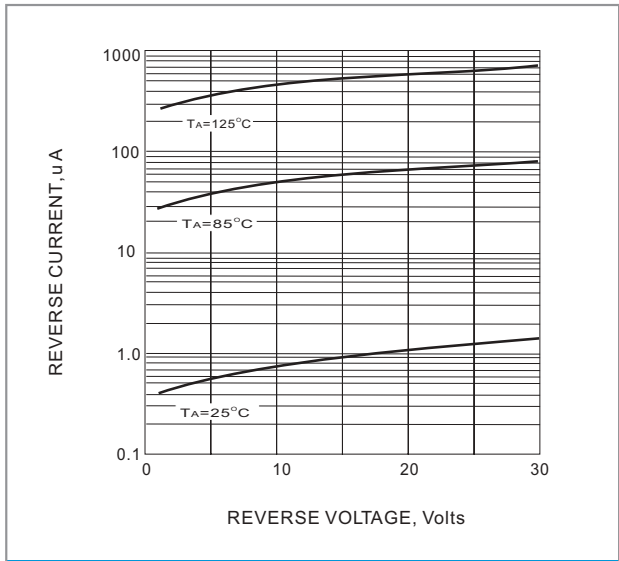
#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

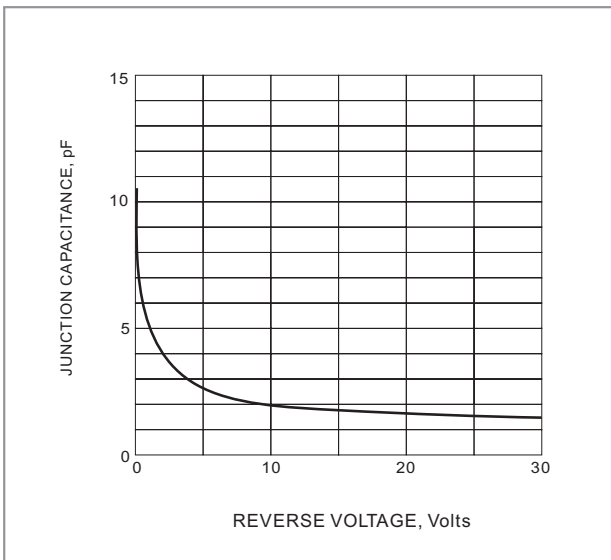
Parameter	Symbol	Value	Units
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	30	V
Maximum Average Forward Current at Ta=75°C	I <sub>o</sub>	0.2	A
Peak Forward Surge Current, 1.0s (JEDEC method)	I <sub>FSM</sub>	0.6	A
Maximum Instantaneous Forward Voltage @ I <sub>F</sub> =1mA @I <sub>F</sub> =100mA	V <sub>F</sub>	0.32 1.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage@V <sub>R</sub> =25V	I <sub>R</sub>	2.0	uA
Junction Capacitance at V <sub>R</sub> =1V	C <sub>j</sub>	10	pF
Thermal Resistance, Junction to Ambient	R <sub>θJA</sub>	500	°C/ W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 TO +125	°C



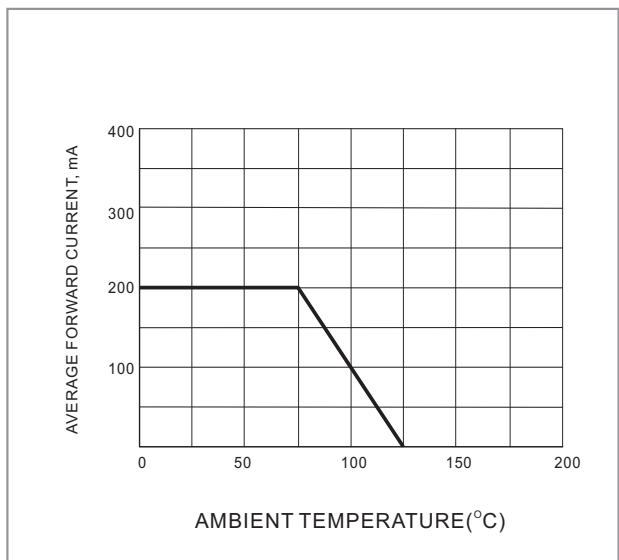
**FIG. 1-TYPICAL FORWARD CHARACTERISTIC**



**FIG. 2-TYPICAL REVERSE CHARACTERISTICS**



**FIG. 3 TYPICAL JUNCTION CAPACITANCE**



**FIG. 4 FORWARD CURRENT DERATING**