



DATA SHEET

BAT42WS~BAT43WS

SURFACE MOUNT SCHOTTKY BARRIER

VOLTAGE 30 Volts **CURRENT** 0.20 Amperes

SOD-323

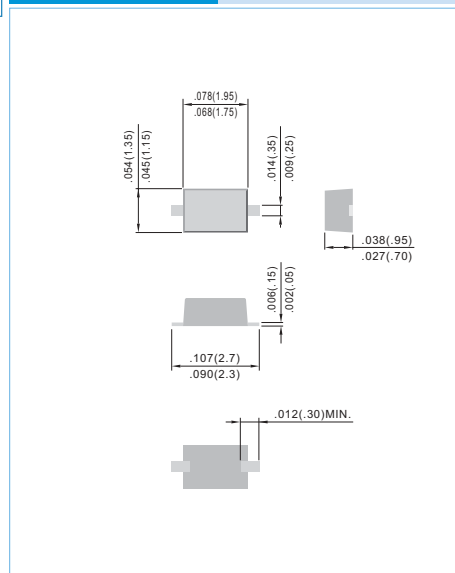
Unit: inch (mm)

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
Polarity: See Diagram Below
Approx. Weight: 0.0045 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameter	Symbol	BAT42WS	BAT43WS	Units
Marking Code		L2	L3	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	30		V
Maximum RMS Voltage	V_{RMS}	21		V
Maximum DC Blocking Voltage	V_{DC}	30		V
Maximum Average Forward Current at $T_a=75^{\circ}C$	I_{AV}	0.2		A
Peak Forward Surge Current, 1. ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	4.0		A
Maximum Instantaneous Forward Voltage	V_F	0.4 / 10mA 1.0 / 200mA	0.33 / 2.0mA 1.0 / 200mA	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.5		uA
Maximum Thermal Resistance (Note 1)	$R_{\theta JA}$	635		°C / W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 TO +125		°C

Note: 1. C_j at $V_r=1$, $f=1MHz$

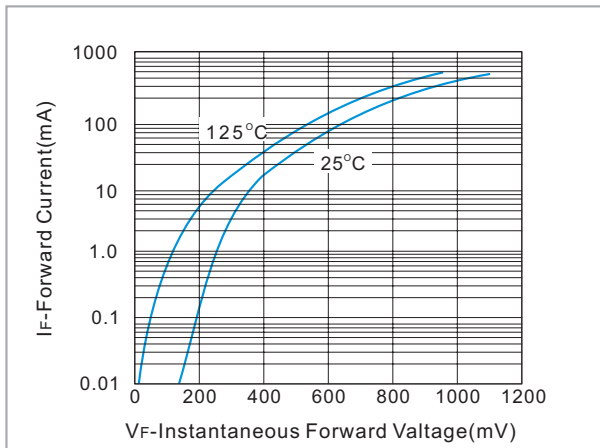


Fig. 1-TYPICAL FORWARD CHARACTERISTIC

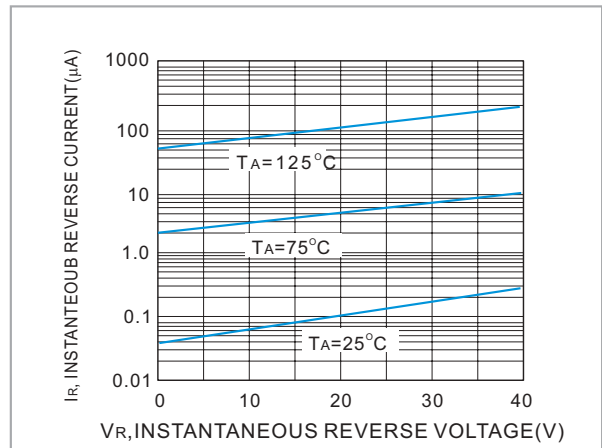


Fig. 2-TYPICAL REVERSE CHARACTERISTICS

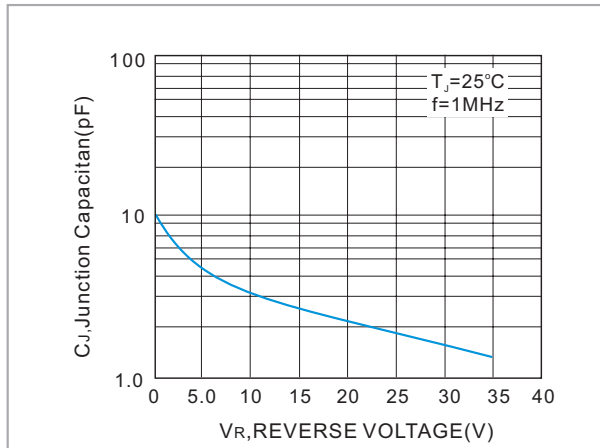


Fig. 3-TYPICAL JUNCTION CAPACITANCE

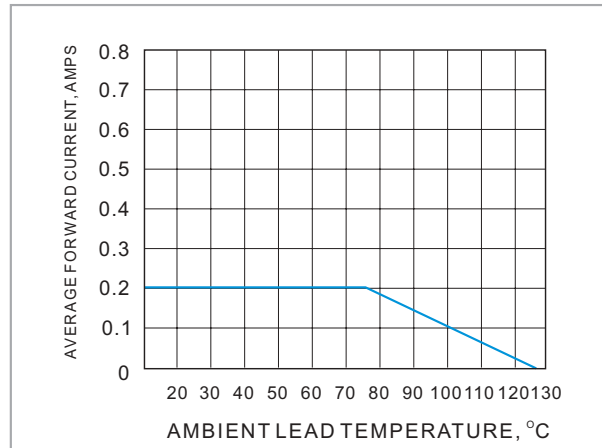


Fig. 4-FORWARD DERATING CURVE