



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

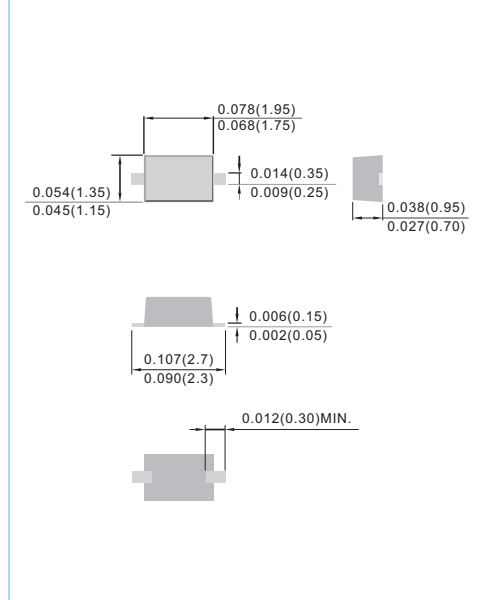
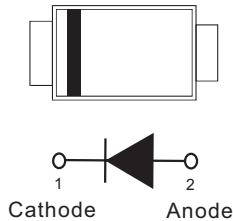
MECHANICAL DATA

Case: SOD-323, Plastic

Terminals: Solderable per MIL-STD-750, Method 2026

Polarity : Color band cathode

Approx. Weight: 0.004 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 $T_A=75^\circ\text{C}$	$I_{F(AV)}$	0.2		A
Peak Forward Surge Current, 1.0ms 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		μA
Maximum Thermal Resistance	$R_{\theta JA}$	635		$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +125		$^\circ\text{C}$

Note : 1.C_J at $V_R=1$, $f=1\text{MHz}$

2.Mounted on FR-4 board with recommended pad layout



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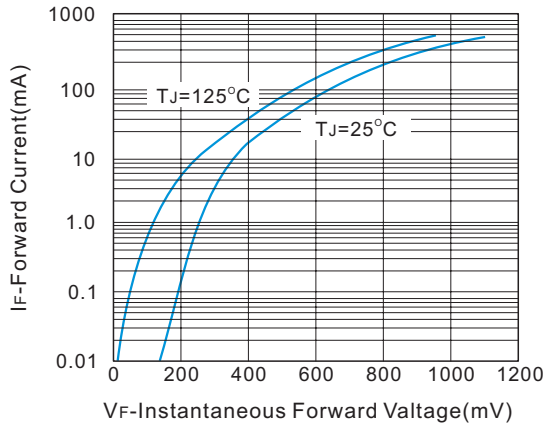


Fig. 1-TYPICAL FORWARD CHARACTERISTIC

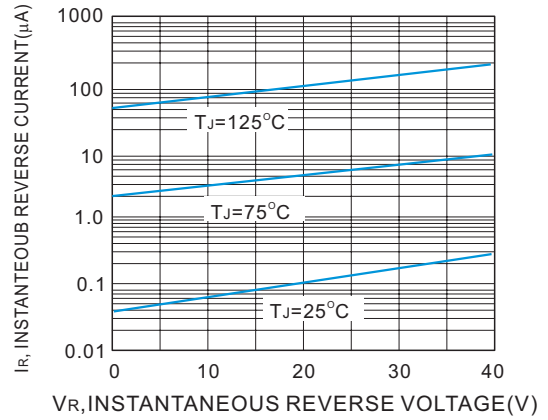


Fig. 2-TYPICAL REVERSE CHARACTERISTICS

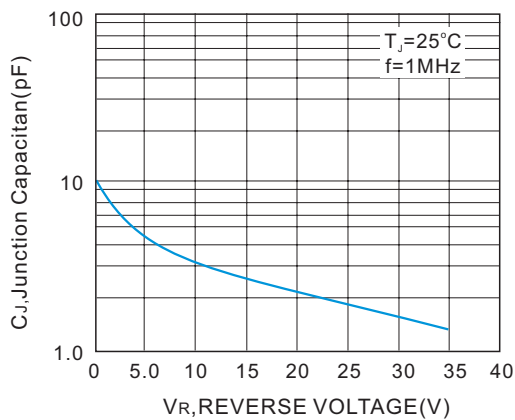


Fig. 3-TYPICAL JUNCTION CAPACITANCE

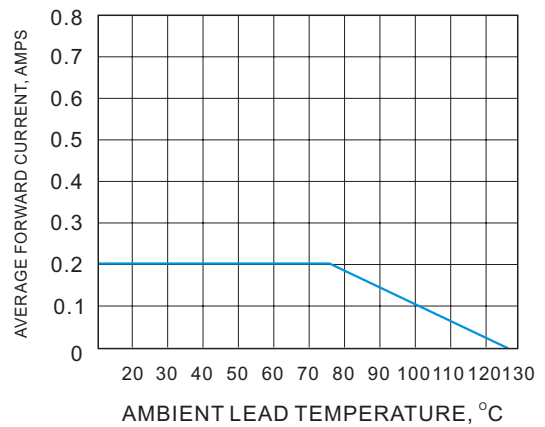
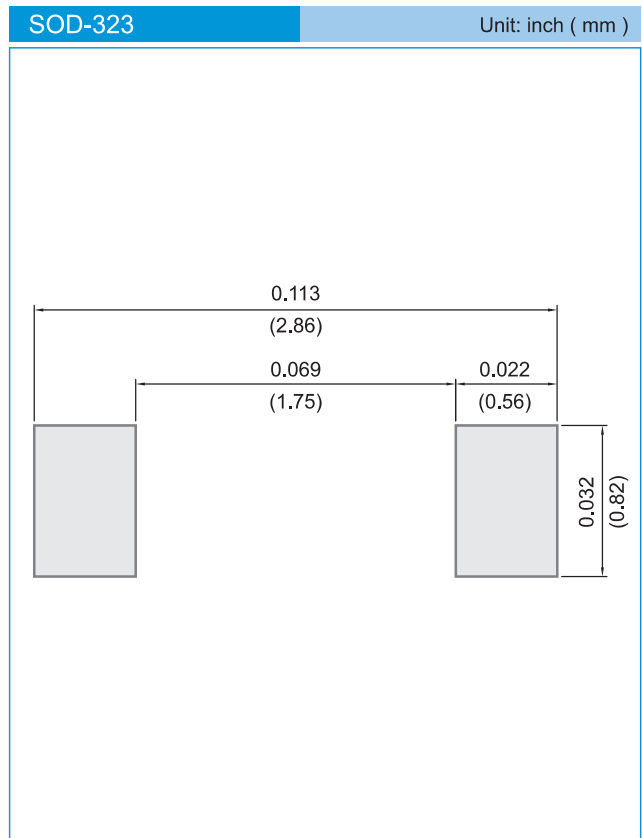


Fig. 4-FORWARD DERATING CURVE



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 5K per 7" plastic Reel

LEGAL STATEMENT

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