



BAT42WS~BAT43WS

SURFACE MOUNT SCHOTTKY BARRIER

VOLTAGE 30 Volt **CURRENT** 0.2 Ampere

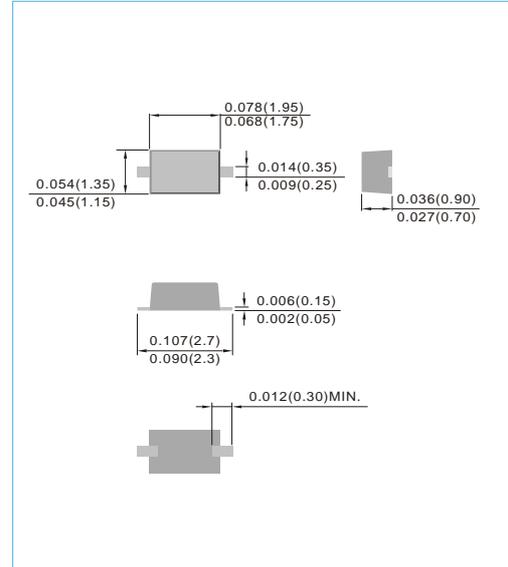
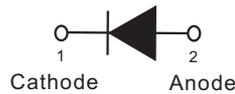
SOD-323 Unit : inch(mm)

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: SOD-323, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Approx. Weight: 0.00014 ounces, 0.004 grams



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	$I_{F(AV)}$	0.2		A
Peak Forward Surge Current, 1ms single half sine-wave superimposed on rated load	I_{FSM}	4		A
Maximum Instantaneous Forward Voltage	V_F	0.4 / 10mA 1 / 200mA	0.33 / 2mA 1 / 200mA	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.5		μA
Maximum Thermal Resistance	$R_{\theta JA}$	635		$^{\circ}C / W$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +125		$^{\circ}C$

Note : 1.C_J at V_R=1, f=1MHz

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



BAT42WS~BAT43WS

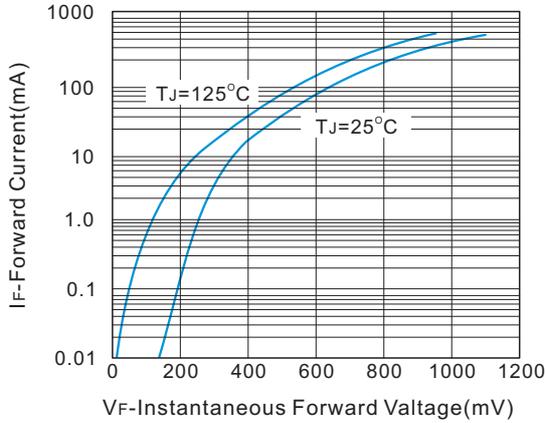


Fig. 1-TYPICAL FORWARD CHARACTERISTIC

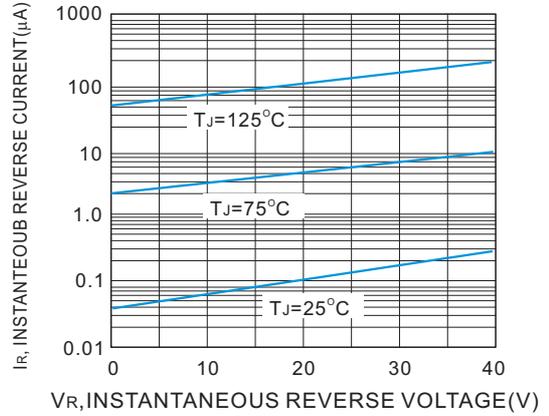


Fig. 2-TYPICAL REVERSE CHARACTERISTICS

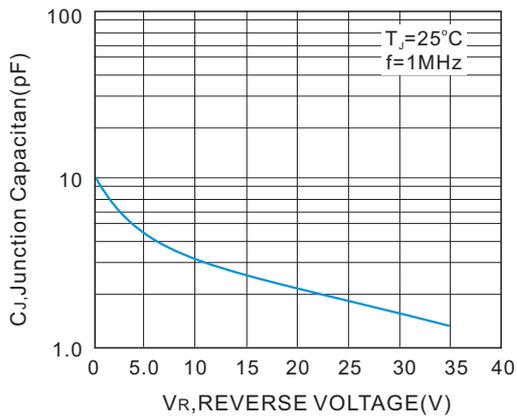


Fig. 3-TYPICAL JUNCTION CAPACITANCE

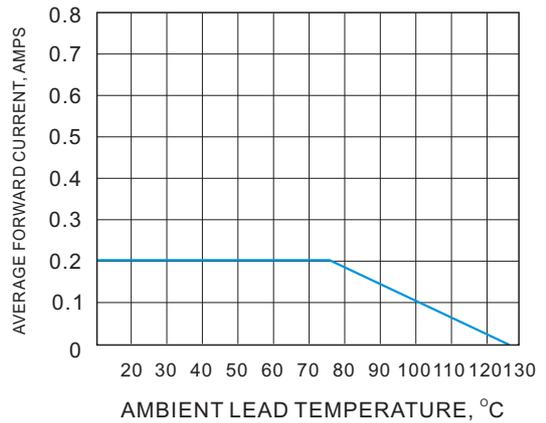


Fig. 4-FORWARD DERATING CURVE

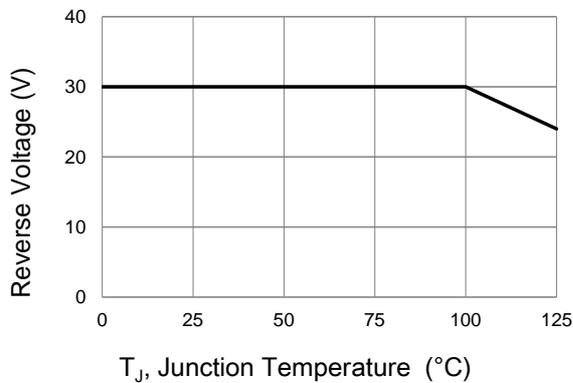
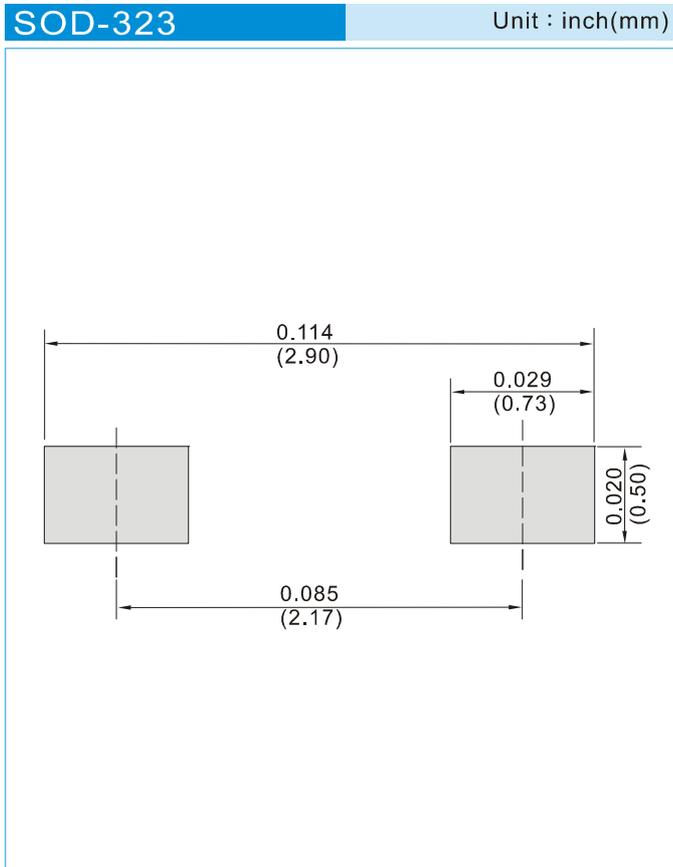


Fig.5 Operating Temperature Derating Curve



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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



BAT42WS~BAT43WS

Part No_packing code_Version

BAT42WS_R1_00001

BAT42WS_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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