



# BAS40WS

## SURFACE MOUNT SCHOTTKY DIODES

**VOLTAGE** 40 Volt **CURRENT** 0.2 Ampere

**SOD-323**

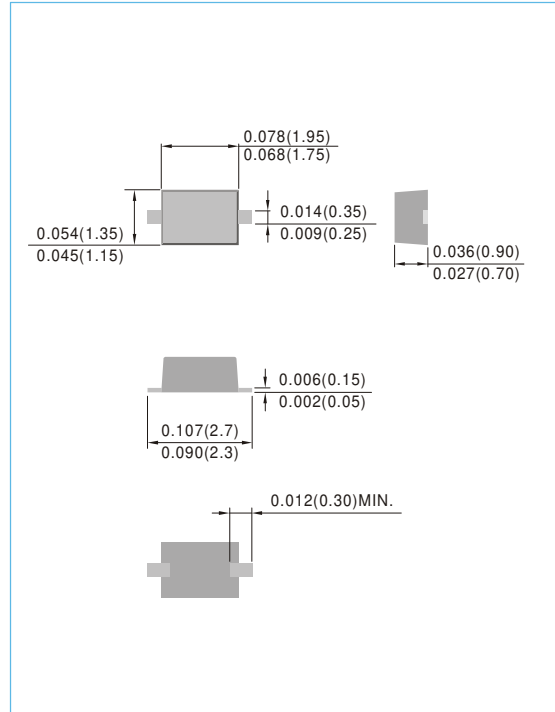
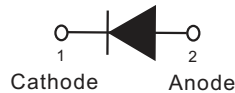
Unit : inch(mm)

### FEATURES

- Fast switching speed
- Surface mount package ideally suited for automatic insertion  
Electrical identical standard JEDEC
- High conductor
- 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
- Approx. Weight: 0.00014 ounces, 0.0041 grams
- Polarity: Color band denotes cathode end
- Marking: S40



### ABSOLUTE RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	LIMITS	UNITS
Reverse Voltage	V <sub>R</sub>	40	V
Peak Reverse Voltage	V <sub>RRM</sub>	40	V
Average Rectified Current at Temp=25°C	I <sub>F</sub>	0.2	A
Non-repetitive Peak Forward Surge Current at t=1ms	I <sub>FSM</sub>	4	A

### THERMAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNITS
Power Dissipation	P <sub>TOT</sub>	225	mW
Thermal Resistance , Junction to Ambient	R <sub>θJA</sub>	556	°C/W
Operating Junction Temperature and Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	-55 to 150	°C



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## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>R</sub> =10 A	40	--	--	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =25 V V <sub>R</sub> =40 V	--	--	1.0 10	A
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =1.0mA I <sub>F</sub> =10mA I <sub>F</sub> =40mA	--	--	0.38 0.50 1.00	V
Total Capacitance	C <sub>T</sub>	V <sub>R</sub> =0V, f=1.0MHz	--	--	5.0	pF



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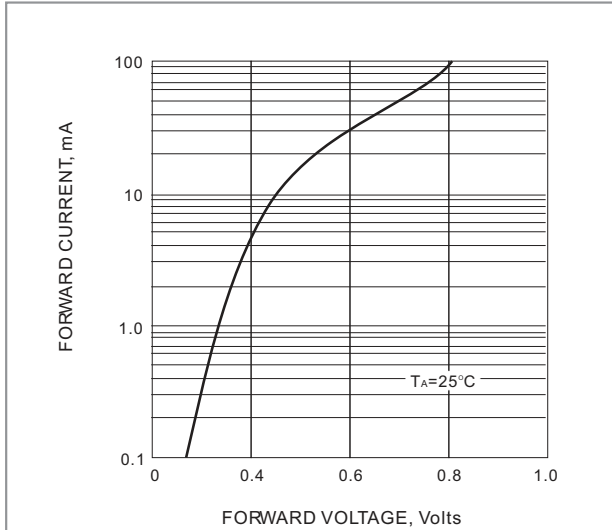


FIG. 1 TYPICAL FORWARD CHARACTERISTIC

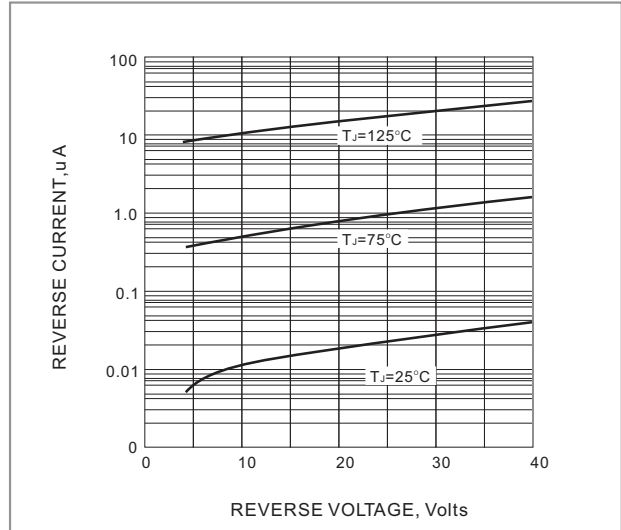


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

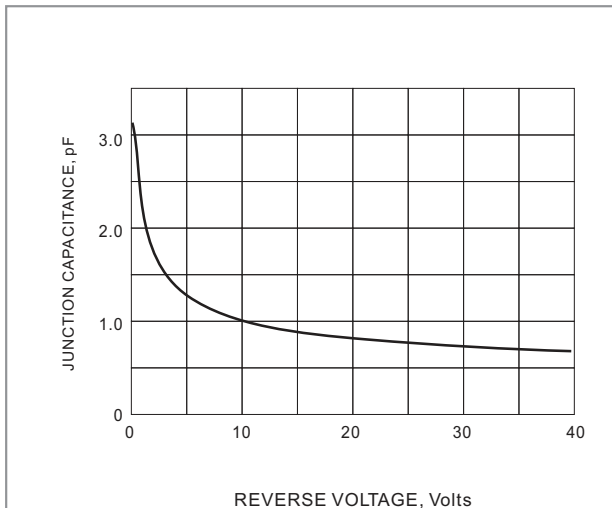


FIG. 3 TYPICAL JUNCTION CAPACITANCE

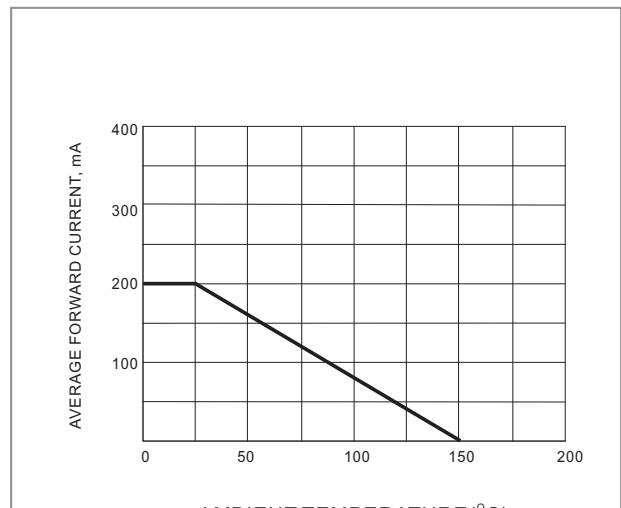


FIG. 4 FORWARD CURRENT DERATING

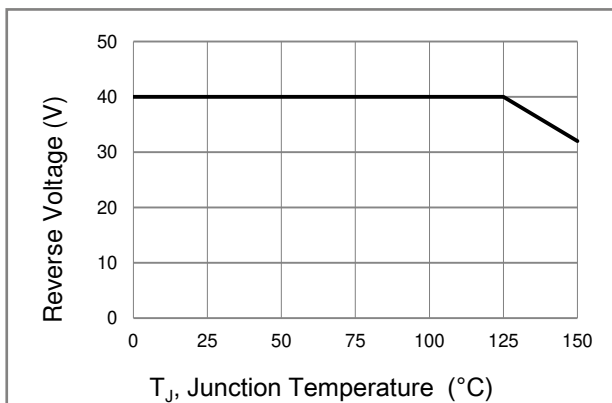
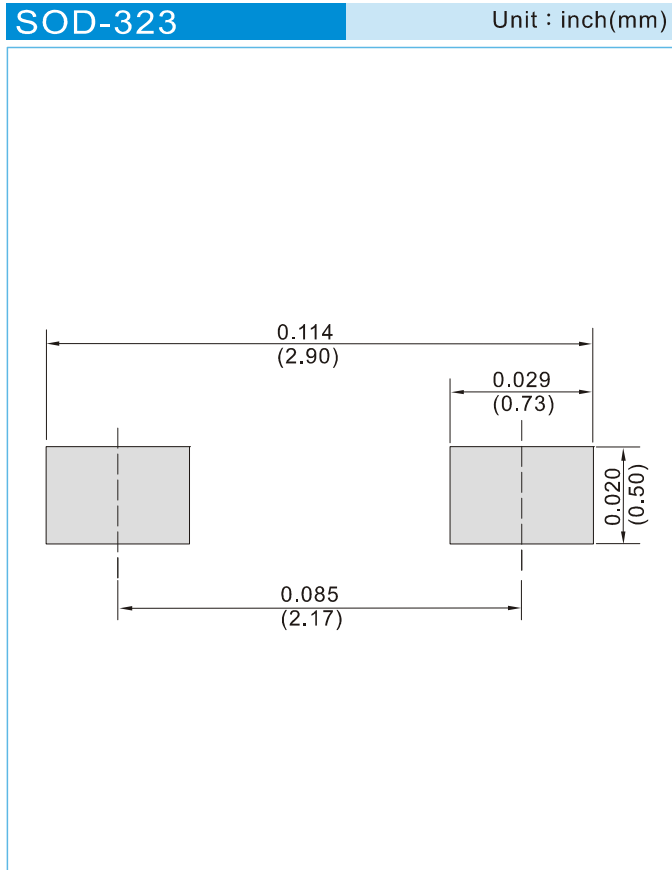


Fig.5 Operating Temperature Derating Curve



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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



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## Part No\_packing code\_Version

BAS40WS\_R1\_00001

BAS40WS\_R2\_00001

For example :

**RB500V-40** **R2** **00001**



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



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