

# SB320 SERIES

## SCHOTTKY BARRIER RECTIFIERS

**VOLTAGE** 20 to 60 Volt **CURRENT** 3 Ampere

**DO-201AD**

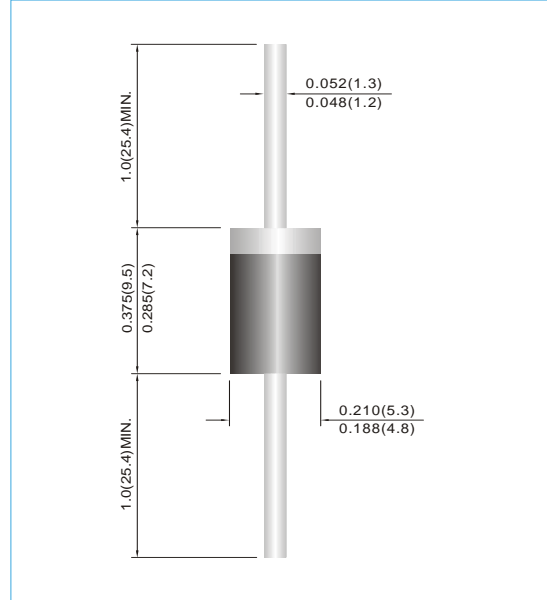
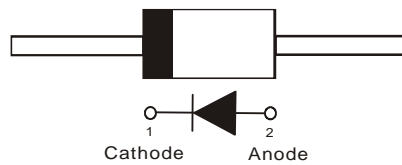
Unit : inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- For use in low voltage,high frequency inverters, free wheeling, and polarity protection applications
- Lead free in compliance with EU RoHS 2011/65/EU directive

### MECHANICAL DATA

- Case: DO-201AD Molded plastic
- Terminals: Axial leads, solderable per MIL-STD-750,Method 2026
- Polarity: Color band denotes cathode
- Weight: 0.04 ounces, 1.142 grams



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

PARAMETER	SYMBOL	SB320	SB330	SB340	SB350	SB360	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	V
Maximum Average Forward Rectified Current 0.375"(9.5mm) lead length	I <sub>F(AV)</sub>	3					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	80					A
Maximum Forward Voltage at 3A (Note 3)	V <sub>F</sub>	0.5			0.75		V
Maximum DC Reverse Current at Rated DC Blocking Voltage T <sub>J</sub> =25°C T <sub>J</sub> =100°C	I <sub>R</sub>	0.2 30			0.1 30		mA
Typical Thermal Resistance (Note 2) (Note 1) (Note 1)	R <sub>θJA</sub> R <sub>θJC</sub> R <sub>θJL</sub>	50 12 15					°C / W
Operating Junction and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to +125		-55 to +150			°C

#### Notes :

- Measured at ambient temperature at a distance of 9.5mm from the case
- Minimum Pad Area
- Pulse test : 300μs pulse width , 1% duty cycle

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## RATING AND CHARACTERISTIC CURVES

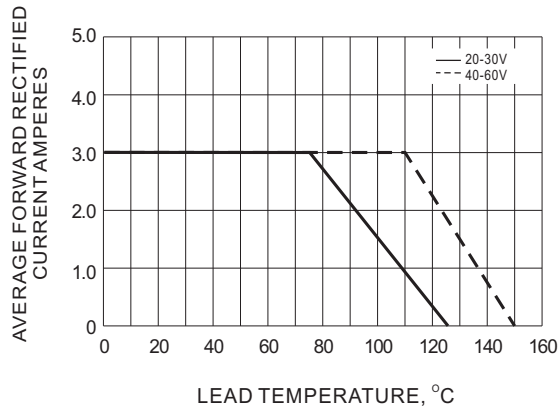


Fig.1 FORWARD CURRENT DERATING CURVE

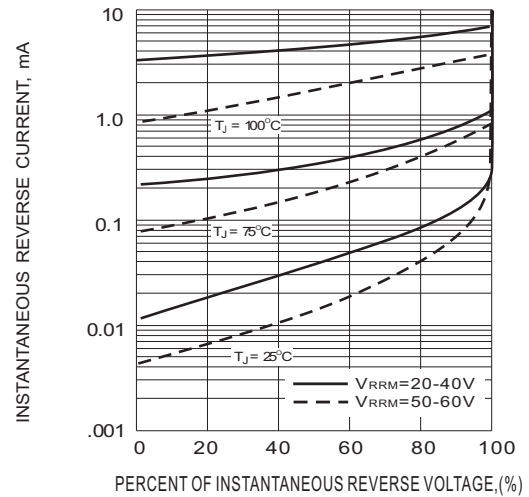


Fig.2 TYPICAL REVERSE CHARACTERISTICS

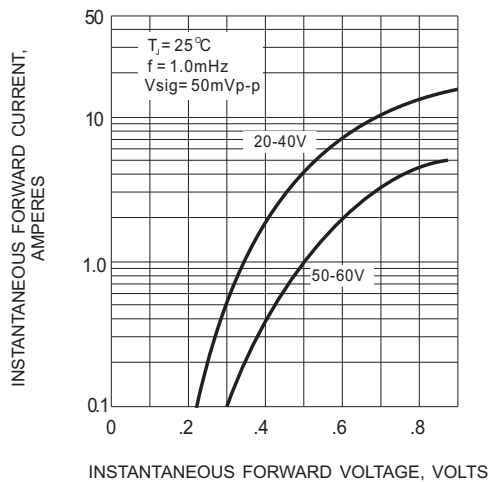


Fig.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

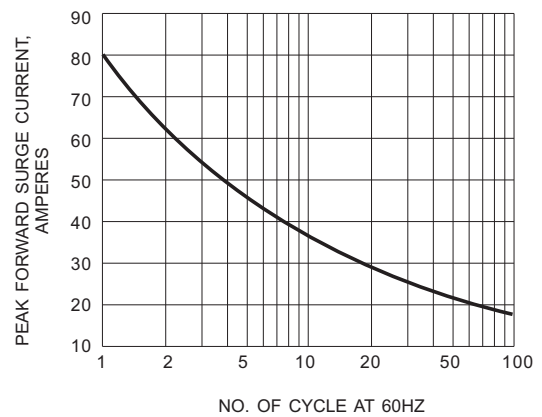


Fig.4 MAXIMUM NON - REPETITIVE SURGE CURRENT

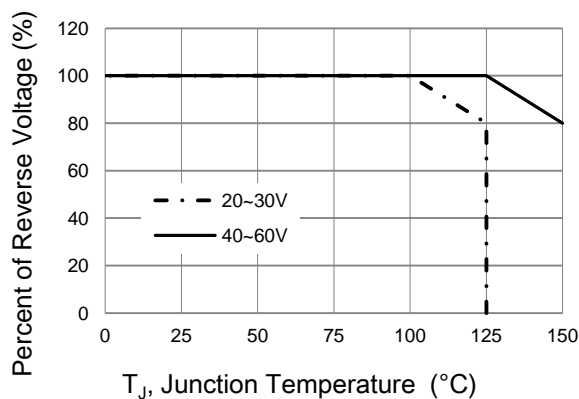


Fig.5 Operating Temperature Derating Curve

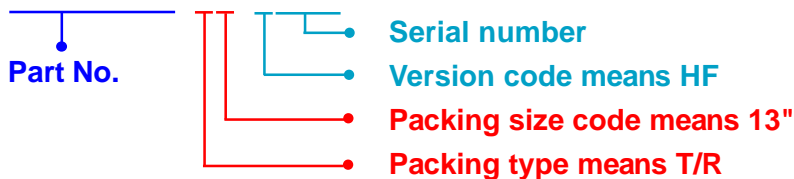
## SB320 SERIES

### Part No\_packing code\_Version

SB320\_AY\_00001  
SB320\_AY\_10001  
SB320\_B0\_00001  
SB320\_B0\_10001  
SB320\_R2\_00001  
SB320\_R2\_10001

### 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)	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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[SB340\\_F0\\_000A6](#)