



#### **SCHOTTKY BARRIER RECTIFIERS**

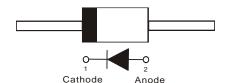
VOLTAGE 20 to 60 Volt CURRENT 3 Ampere

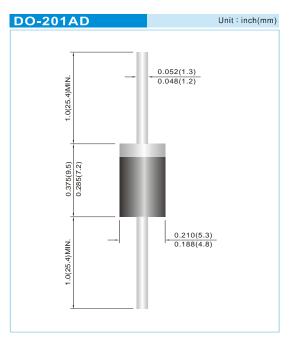
#### **FEATURES**

- Plastic package has Underwriters Laboratory
   Flammability Classification 94V-O utilizing
   Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MIL-S-19500/228
- 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: 0.0395 ounces, 1.122 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.

SYMBOL	SB320	SB330	SB340	SB350	SB360	UNITS
V <sub>RRM</sub>	20	30	40	50	60	V
V <sub>RMS</sub>	14	21	28	35	42	V
V <sub>DC</sub>	20	30	40	50	60	V
I <sub>F(AV)</sub>	3					Α
I <sub>FSM</sub>	80					А
V <sub>F</sub>	0.5			0.75		V
I <sub>R</sub>	0.2 30			0.1 30		mA
$R_{_{\theta JA}} \\ R_{_{\theta JC}} \\ R_{_{\theta JL}}$	50 12 15				°C / W	
T <sub>J</sub> ,T <sub>STG</sub>	-55 to +125 -55 to +150			50	°C	
	$V_{RRM}$ $V_{RMS}$ $V_{DC}$ $I_{F(AV)}$ $I_{FSM}$ $V_{F}$ $I_{R}$ $R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	V <sub>RRM</sub> 20  V <sub>RMS</sub> 14  V <sub>DC</sub> 20  I <sub>F(AV)</sub> I <sub>FSM</sub> V <sub>F</sub> I <sub>R</sub> R <sub>0JA</sub> R <sub>0JC</sub> R <sub>0JL</sub> R <sub>0JL</sub>	V <sub>RRM</sub> 20 30  V <sub>RMS</sub> 14 21  V <sub>DC</sub> 20 30  I <sub>F(AV)</sub> I <sub>FSM</sub> V <sub>F</sub> 0.5  I <sub>R</sub> 30  R <sub>θJA</sub> R <sub>θJC</sub> R <sub>θJL</sub> R <sub>θJL</sub>	V <sub>RRM</sub> 20     30     40       V <sub>RMS</sub> 14     21     28       V <sub>DC</sub> 20     30     40       I <sub>F(AV)</sub> 3       I <sub>FSM</sub> 80       V <sub>F</sub> 0.5       I <sub>R</sub> 0.2       30     30       R <sub>0JA</sub> R <sub>0JC</sub> R <sub>0JL</sub> 50       R <sub>0JC</sub> R <sub>0JL</sub> 12       15	V <sub>RRM</sub> 20         30         40         50           V <sub>RMS</sub> 14         21         28         35           V <sub>DC</sub> 20         30         40         50           I <sub>F(AV)</sub> 3         3         3         3         3           I <sub>FSM</sub> 80         0.2         0	V <sub>RRM</sub> 20         30         40         50         60           V <sub>RMS</sub> 14         21         28         35         42           V <sub>DC</sub> 20         30         40         50         60           I <sub>F(AV)</sub> 3         3         3         3         3         1         1         3

#### Notes

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





#### **RATING AND CHARACTERISTIC CURVES**

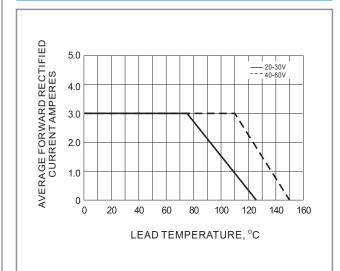
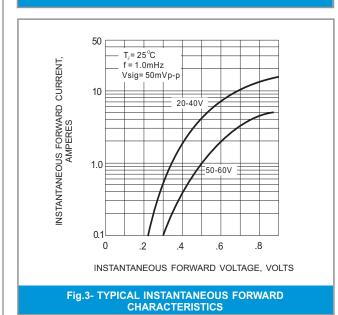


Fig.1- FORWARD CURRENT DERATING CURVE



1.0 T<sub>J</sub> = 100°C T

Fig.2- TYPICAL REVERSE CHARACTERISTICS

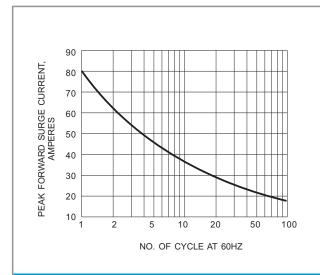


Fig.4- MAXIMUM NON - REPETITIVE SURGE CURRENT





## 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:



Packing Code XX				Version Code XXXXX			
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)	Α	N/A	0	HF	0	serial number	
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number	
Bulk Packing (B/P)	В	13"	2				
Tube Packing (T/P)	Т	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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