



#### LOW VF SCHOTTKY BARRIER RECTIFIERS

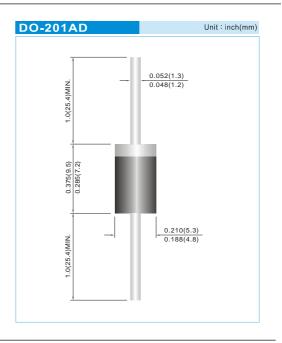
VOLTAGE 100 Volt CURRENT 5 Ampere

#### **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: 0.0403 ounces, 1.142 grams



#### MAXIMUM RATINGS(TA=25°C unless otherwise noted)

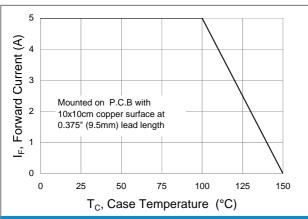
PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	Vrrm	100	V
Maximum rms voltage	VRMS	70	V
Maximum average forward rectified current	I F(AV)	5	А
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	IFSM	250	А
Typical Thermal Resistance	Rөja	45	°C/W
Operating junction temperature range	Tı	-55 to + 150	°C
Storage temperature range	Тѕтс	-55 to + 150	°C

### ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS		TYP.	MAX.	UNIT
Breakdown voltage	VBR	I R=0.5mA	TJ=25°C	100	-	V
Instantaneous forward voltage	VF	I F=1A I F=3A I F=5A	TJ=25°C	0.44 0.58 0.68	- - 0.70	V
		I F=1A I F=3A I F=5A	T <sub>J</sub> =125°C	0.35 0.49 0.56	- - 0.6	V
Reverse current	l R	VR=70V	TJ=25°C	10	-	μΑ
		VR=100V	TJ=25°C TJ=100°C TJ=125°C	- - -	50 10 50	μΑ mA mA







**Fig.1 Forward Current Derating Curve** 

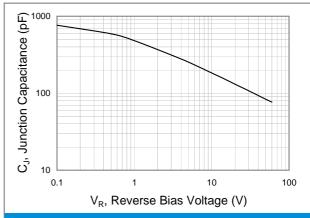


Fig.2 Typical Junction Capacitance

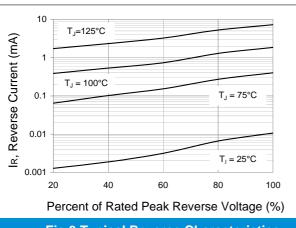
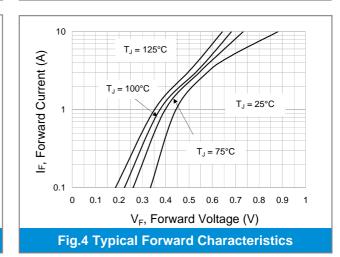
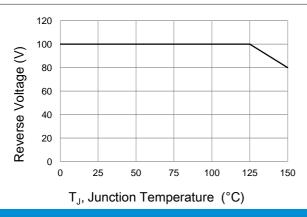


Fig.3 Typical Reverse Characteristics





**Fig.5 Operating Temperature Derating Curve** 





## Part No\_packing code\_Version

SB5100L\_AY\_00001

SB5100L\_AY\_10001

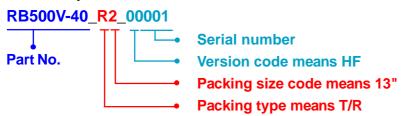
SB5100L\_B0\_00001

SB5100L\_B0\_10001

SB5100L\_R2\_00001

SB5100L\_R2\_10001

## For example:



Packing Code XX				Version Code XXXXX			
Packing type	1st Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1st 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	Υ				
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U				
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D				





## **Disclaimer**

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties
  of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation.
   Customers are responsible in comprehending the suitable use in particular applications.
   Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Panjit:

<u>SB5100L\_R2\_00001</u> <u>SB5100L\_R2\_10001</u> <u>SB5100L\_AY\_00001</u> <u>SB5100L\_AY\_10001</u> <u>SB5100L\_B0\_10001</u> <u>SB5100L\_F0\_000A1</u> <u>SB5100L\_F0\_000A2</u> <u>SB5100L\_F0\_100A4</u>