



SB5100L

LOW VF SCHOTTKY BARRIER RECTIFIERS

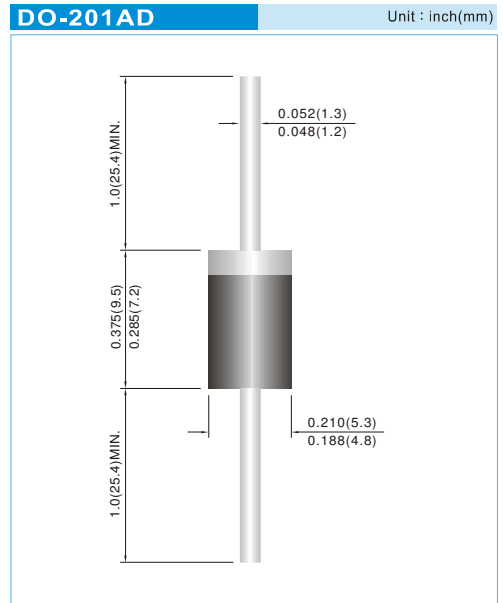
VOLTAGE 100 Volt **CURRENT** 5 Ampere

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(T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	100	V
Maximum rms voltage	V _{RMS}	70	V
Maximum average forward rectified current	I _{F(AV)}	5	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	250	A
Typical Thermal Resistance	R _{θJA}	45	°C/W
Operating junction temperature range	T _J	-55 to + 150	°C
Storage temperature range	T _{STG}	-55 to + 150	°C

ELECTRICAL CHARACTERISTICS(T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	TYP.	MAX.	UNIT
Breakdown voltage	V _{BR}	I _R =0.5mA T _J =25°C	100	-	V
Instantaneous forward voltage	V _F	I _F =1A T _J =25°C	0.44	-	V
		I _F =3A T _J =25°C	0.58	-	
		I _F =5A T _J =25°C	0.68	0.70	
Reverse current	I _R	I _F =1A T _J =125°C	0.35	-	V
		I _F =3A T _J =125°C	0.49	-	
		I _F =5A T _J =125°C	0.56	0.6	
Reverse current	I _R	V _R =70V T _J =25°C	10	-	μA
		V _R =100V T _J =25°C	-	50	μA
		V _R =100V T _J =100°C	-	10	mA
		V _R =100V T _J =125°C	-	50	mA



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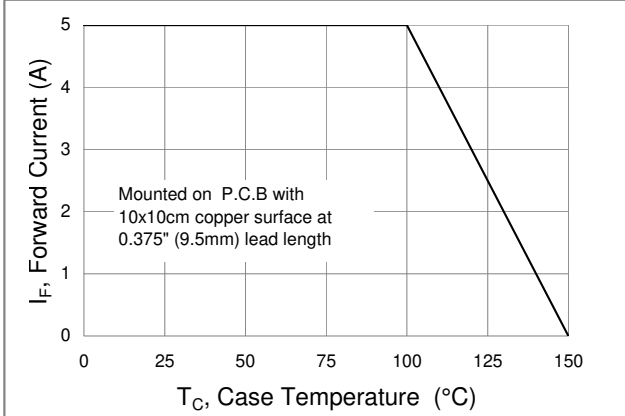


Fig.1 Forward Current Derating Curve

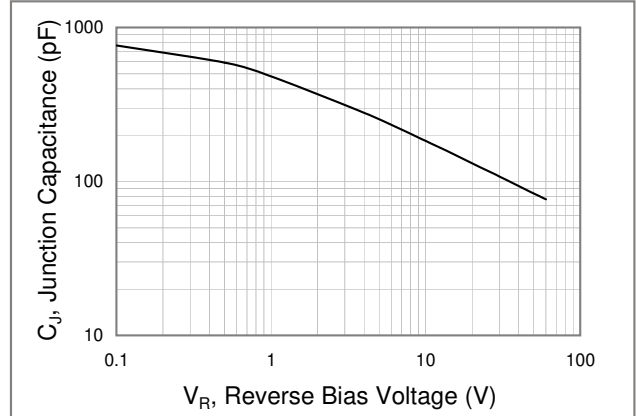


Fig.2 Typical Junction Capacitance

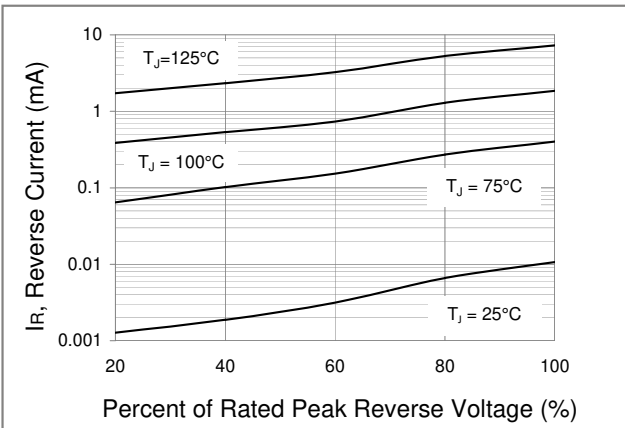


Fig.3 Typical Reverse Characteristics

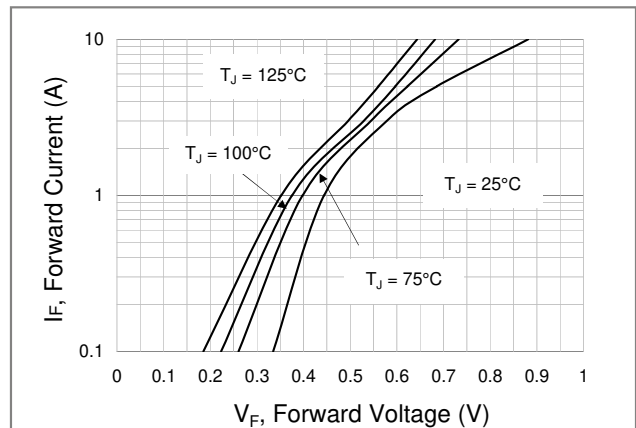


Fig.4 Typical Forward Characteristics

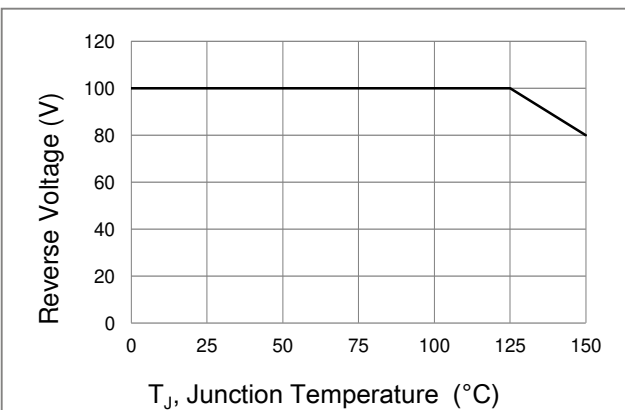


Fig.5 Operating Temperature Derating Curve



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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 :

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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