



SB540L

ULTRA LOW VF SCHOTTKY RECTIFIER

VOLTAGE 40 Volt **CURRENT** 5 Ampere

FEATURES

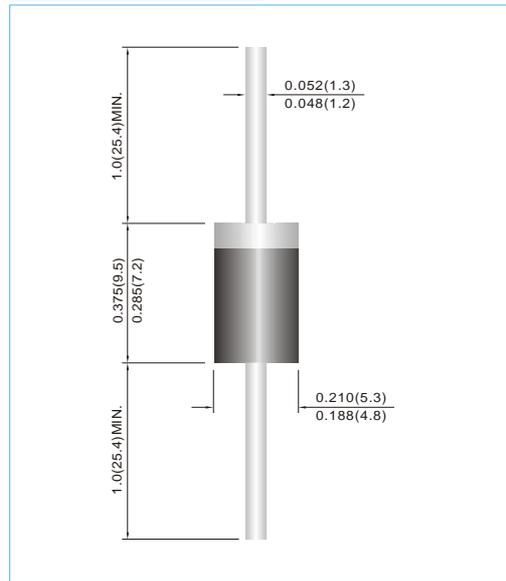
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- ESD Passed devices : Air mode 15KV, human body mode 8KV
- Lead free 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 end
- Weight: 0.0403 ounces, 1.142 grams

DO-201AD

Unit : inch(mm)



MAXIMUM RATINGS(T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	40	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}	150	A
Typical thermal resistance (Notes 1)	R _{θJA}	60	°C/W
(Notes 2)	R _{θJL}	25	
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	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V _{BR}	I _R =1mA T _J =25°C	40	-	-	V
Instantaneous forward voltage	V _F	I _F =1A T _J =25°C	-	0.35	-	V
		I _F =3A T _J =25°C	-	0.40	-	
		I _F =5A T _J =25°C	-	0.44	0.49	
Reverse current	I _R	I _F =1A T _J =125°C	-	0.21	-	V
		I _F =3A T _J =125°C	-	0.29	-	
		I _F =5A T _J =125°C	-	0.35	-	
Reverse current	I _R	V _R =32V T _J =25°C	-	30	-	μA
		V _R =40V T _J =25°C	-	-	200	μA
		V _R =40V T _J =100°C	-	-	35	mA
		V _R =40V T _J =125°C	-	27	-	mA

Notes :

1. Thermal resistance from junction to ambient 10 mm lead length mounted on PCB with min. pad layout.
2. Thermal resistance from junction to lead at 10 mm lead length with both leads attached to infinite heatsinks.



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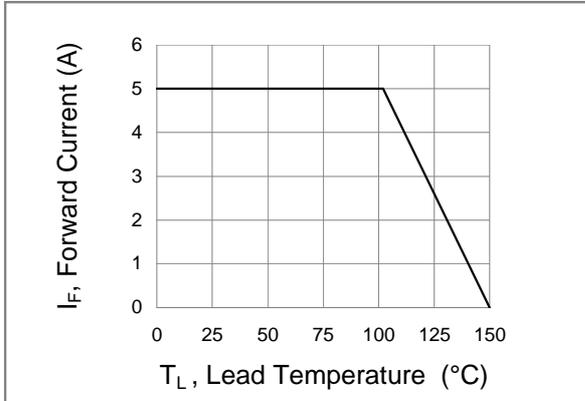


Fig.1 Forward Current Derating Curve

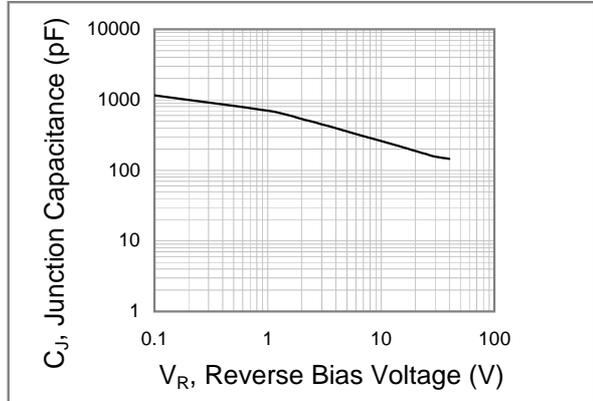


Fig.2 Typical Junction Capacitance

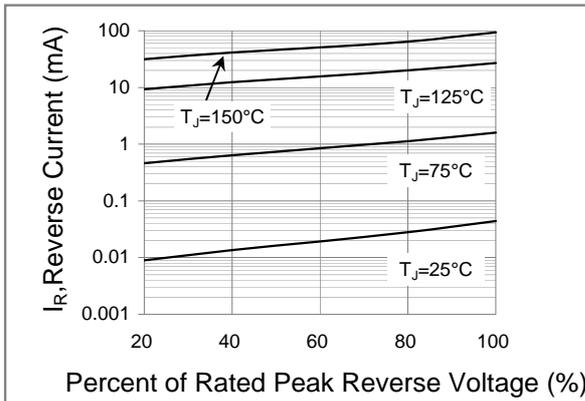


Fig.3 Typical Reverse Characteristics

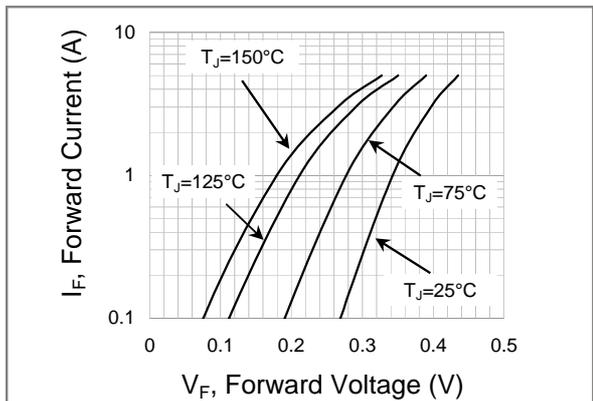


Fig.4 Typical Forward Characteristics

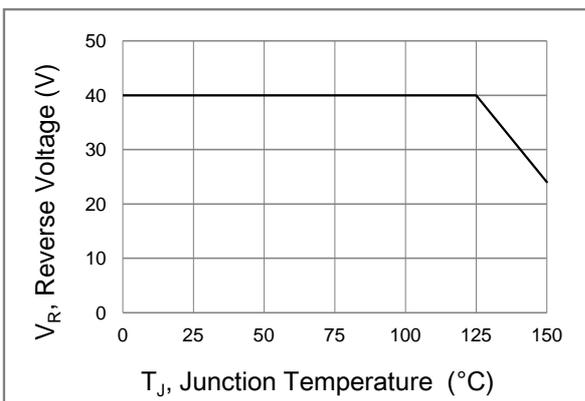


Fig.5 Operating Temperature Derating



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Part No_packing code_Version

SB540L_AY_00001
 SB540L_AY_10001
 SB540L_B0_00001
 SB540L_B0_10001
 SB540L_R2_00001
 SB540L_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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