

SBT5100VSS

ULTRA LOW VF SCHOTTKY RECTIFIER

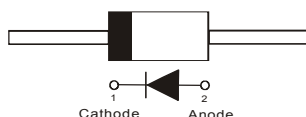
VOLTAGE 100 Volt **CURRENT** 5 Ampere

FEATURES

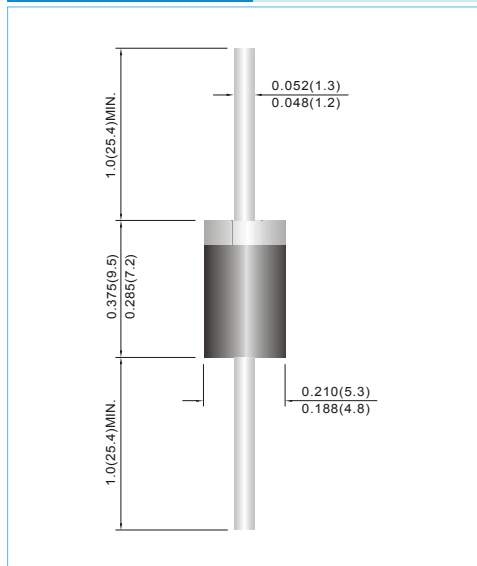
- Ultra low forward voltage drop, low power loss
- High efficiency operation
- Lead free in compliance with EU RoHS 2.0

MECHANICAL DATA

- Case : Molded plastic, DO-201AD
- Terminals : Axial leads,solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Approx weight : 0.0402 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}	100	V
Maximum rms voltage	V _{RMS}	70	V
Maximum dc blocking voltage	V _R	100	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}	110	A
Typical thermal resistance (Note 1)	R _{θJL}	23	°C/W
Operating junction temperature range	T _J	-55 to + 150	°C
Storage temperature range	T _{STG}	-55 to + 150	°C

Note : 1.The testing condition of the thermal resistance (junction to lead) is based on 10 mm lead length between two 10cm x 10cm x 0.5mm copper pad.



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ELECTRICAL CHARACTERISTICS($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V_{BR}	$I_R=0.5\text{mA}$ $T_J=25^{\circ}\text{C}$	100	-	-	V
Instantaneous forward voltage	V_F	$I_F=1\text{A}$ $T_J=25^{\circ}\text{C}$	-	0.42	-	V
		$I_F=3\text{A}$ $T_J=25^{\circ}\text{C}$	-	0.51	-	
		$I_F=5\text{A}$ $T_J=25^{\circ}\text{C}$	-	0.59	0.65	
		$I_F=1\text{A}$ $T_J=125^{\circ}\text{C}$	-	0.32	-	V
Reverse current	I_R	$V_R=80\text{V}$ $T_J=25^{\circ}\text{C}$	-	5	-	μA
		$V_R=100\text{V}$ $T_J=25^{\circ}\text{C}$ $T_J=125^{\circ}\text{C}$	- -	- 5	50 -	μA mA

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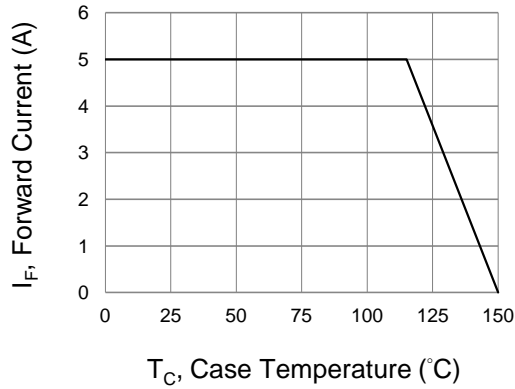


Fig.1 Forward Current Derating Curve

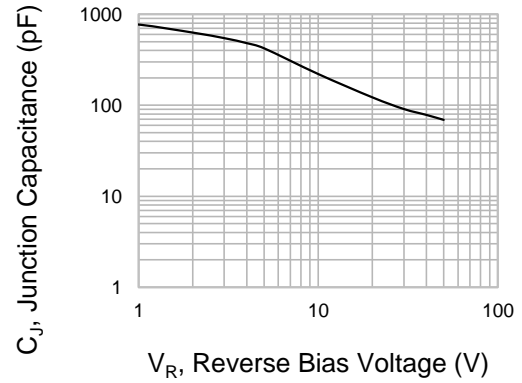


Fig.2 Typical Junction Capacitance

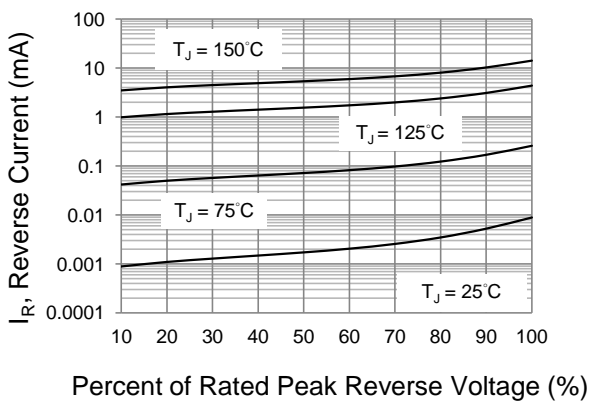


Fig.3 Typical Reverse Characteristics

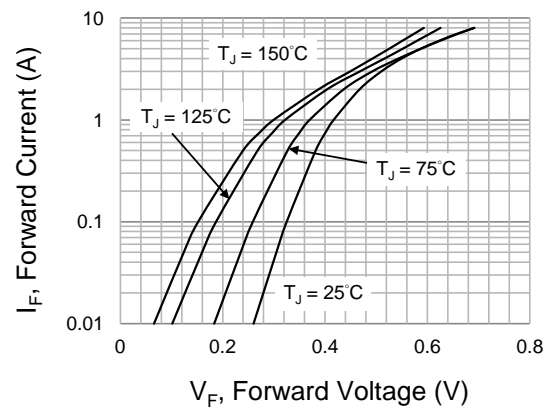


Fig.4 Typical Forward Characteristics

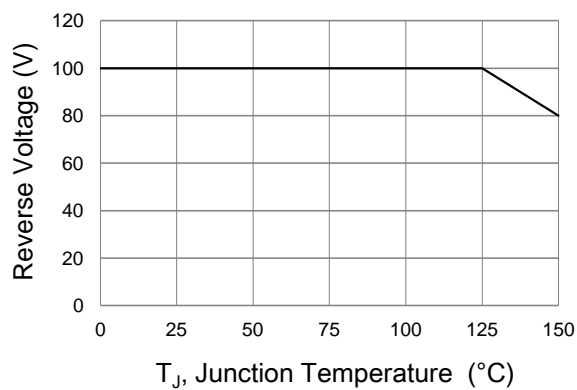


Fig.5 Operating Temperature Derating Curve

SBT5100VSS

Part No_packing code_Version

SBT5100VSS_AY_00001

SBT5100VSS_AY_10001

SBT5100VSS_B0_00001

SBT5100VSS_B0_10001

SBT5100VSS_R2_00001

SBT5100VSS_R2_10001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

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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