

SBT10100VSS

ULTRA LOW VF SCHOTTKY RECTIFIER

VOLTAGE 100 Volt **CURRENT** 10 Ampere

FEATURES

- Ultra low forward voltage drop, low power loss
- High efficiency operation
- Lead free in compliance with EU RoHS 2011/65/EU directive

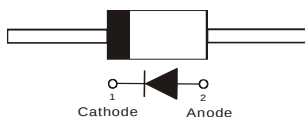
MECHANICAL DATA

Case : Molded plastic, DO-201AD

Terminals : Axial leads,solderable per MIL-STD-750, Method 2026

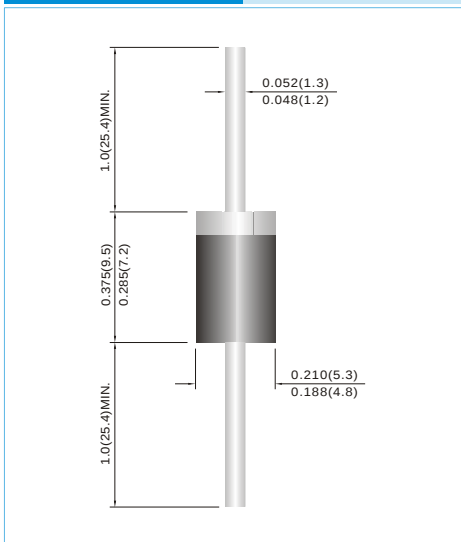
Polarity : Color band denotes cathode end

Approx weight : 0.0402 ounces, 1.142 grams



DO-201AD

Unit : inch(mm)



MAXIMUM RATINGS($T_A=25^{\circ}\text{C}$ 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	$I_{F(AV)}$	10	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	120	A
Typical junction capacitance ($V_R=4V$, $f=1\text{MHz}$)	C_J	510	pF
Typical thermal resistance (Note 1)	$R_{\theta JA}$	60	$^{\circ}\text{C/W}$
(Note 2)	$R_{\theta JL}$	10	
Operating junction temperature range	T_J	-55 to + 150	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to + 150	$^{\circ}\text{C}$

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

2.The testing condition of the thermal resistance (junction to lead) is based on 0 mm lead length between two 10cm x 10cm x1mm 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	$I_F=1\text{A}$ $T_J=25^\circ\text{C}$	-	0.4	-	V
		$I_F=5\text{A}$ $T_J=25^\circ\text{C}$	-	0.53	-	V
		$I_F=10\text{A}$ $T_J=25^\circ\text{C}$	-	0.68	0.74	V
		$I_F=1\text{A}$ $T_J=125^\circ\text{C}$	-	0.29	-	V
Reverse current	I_R	$V_R=80\text{V}$ $T_J=25^\circ\text{C}$	-	5	-	μA
		$V_R=100\text{V}$ $T_J=25^\circ\text{C}$	-	-	50	μA
		$V_R=100\text{V}$ $T_J=125^\circ\text{C}$	-	10	-	mA

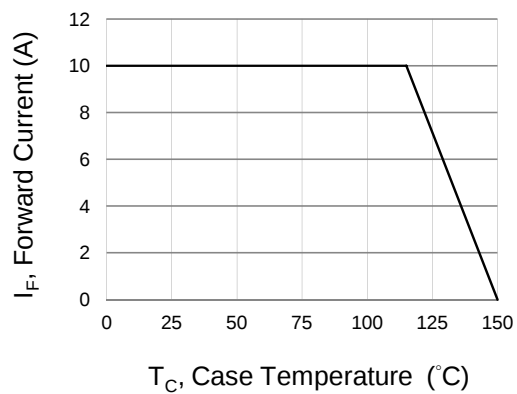


Fig.1 Forward Current Derating Curve

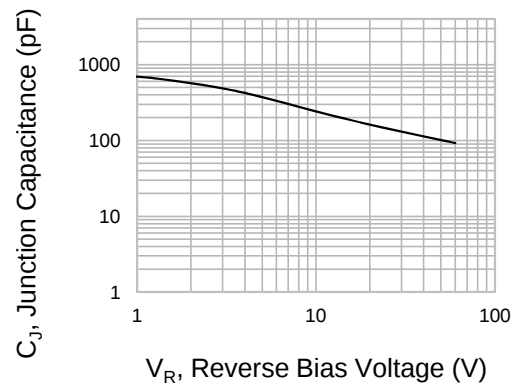


Fig.2 Typical Junction Capacitance

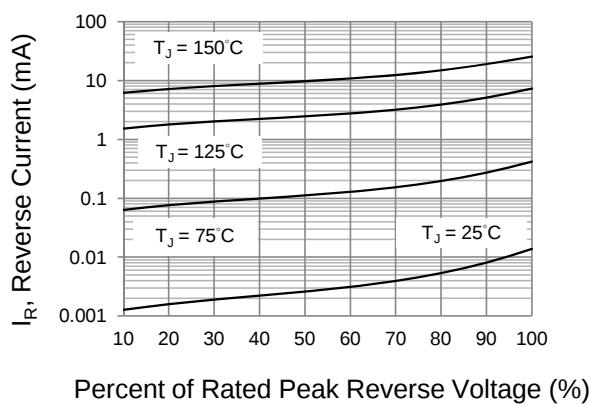


Fig.3 Typical Reverse Characteristics

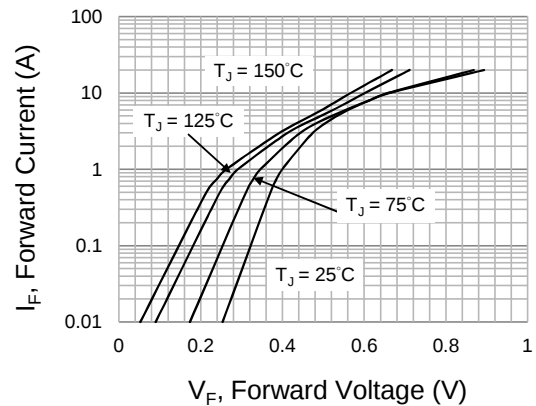


Fig.4 Typical Forward Characteristics

SBT10100VSS

Part No_packing code_Version

SBT10100VSS_AY_00001

SBT10100VSS_AY_10001

SBT10100VSS_B0_00001

SBT10100VSS_B0_10001

SBT10100VSS_R2_00001

SBT10100VSS_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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