



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

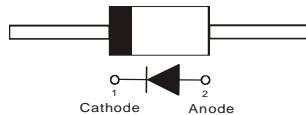
MECHANICAL DATA

Case : Molded plastic, DO-201AD

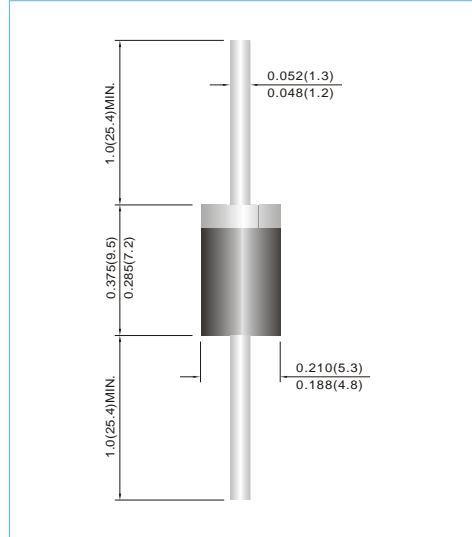
Terminals : Axial leads,solderable per MIL-STD-750, Method 2026

Polarity : Color band denotes cathode end

Approx weight : 0.0402 ounces, 1.142 grams



DO-201AD Unit : inch(mm)



MAXIMUM RATINGS(T_A=25°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=1MHz)	C _J	510	pF
Typical thermal resistance (Note 1)	R _{θJA}	60	°C/W
(Note 2)	R _{θJL}	10	
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 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°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	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	-	0.4	-	V
		I _F =5A	-	0.53	-	V
		I _F =10A	-	0.68	0.74	V
		I _F =1A	-	0.29	-	V
Reverse current	I _R	V _R =80V T _J =25°C	-	5	-	μA
		V _R =100V T _J =25°C T _J =125°C	-	-	50	μA mA

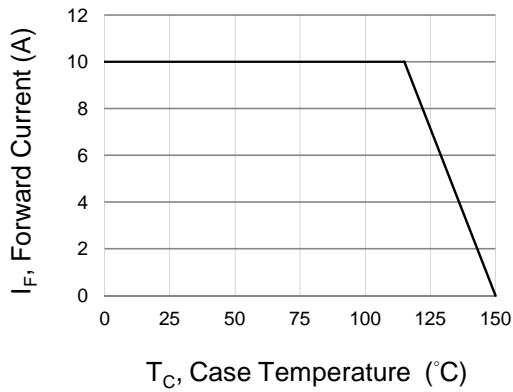


Fig.1 Forward Current Derating Curve

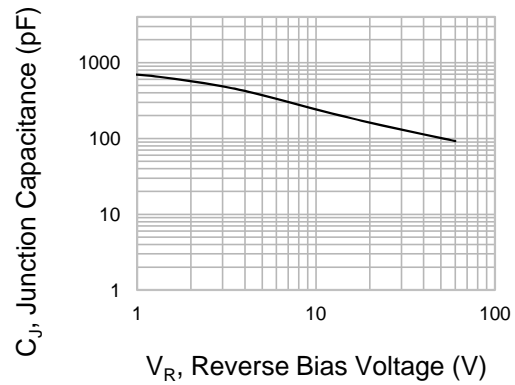


Fig.2 Typical Junction Capacitance

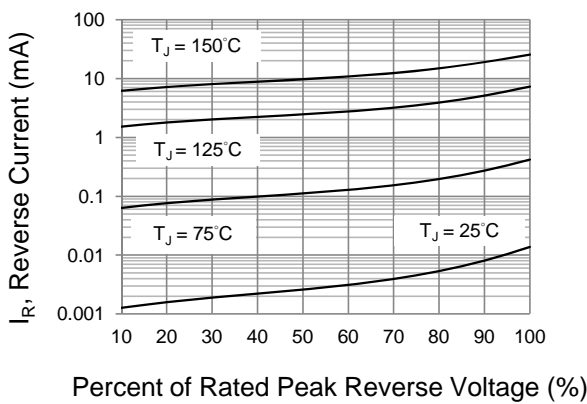


Fig.3 Typical Reverse Characteristics

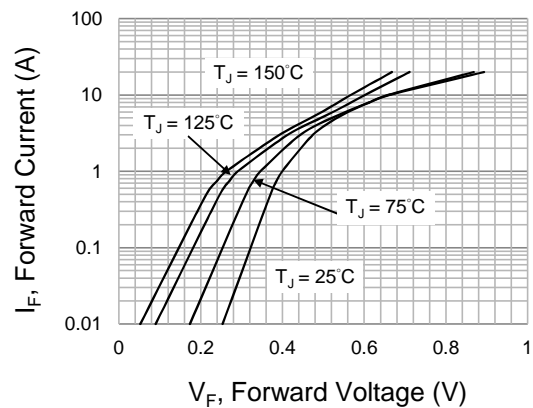


Fig.4 Typical Forward Characteristics



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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



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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