

SBM1550USS

EXTREME LOW VF SCHOTTKY RECTIFIER

VOLTAGE 50 Volts **CURRENT** 15 Amperes

FEATURES

- Extreme low forward voltage drop, low power losses
- High efficiency operation
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

Case : Molded plastic, DO-201AD

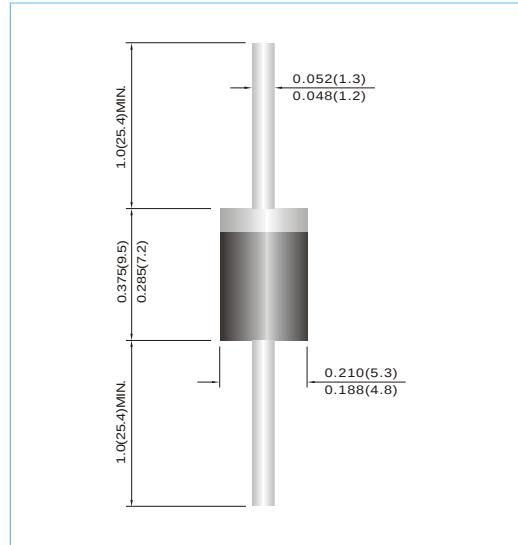
Terminals : Axial leads,solderable per MIL-STD-750, Method 2026

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}	50	V
Maximum rms voltage	V _{RMS}	35	V
Maximum dc blocking voltage	V _R	50	V
Maximum average forward rectified current	I _{F(AV)}	15	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	300	A
Typical thermal resistance (Note 1)	R _{θJA} R _{θJL}	25 10	°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 ambient and junction to lead) is based on 0 lead length between two 10x10cm copper pad heatsinks.

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	50	-	-	V
Instantaneous forward voltage	V _F	I _F =1A	-	0.28	-	V
		I _F =5A T _J =25°C	-	0.35	-	
		I _F =15A	-	0.43	0.49	
		I _F =1A T _J =125°C	-	0.18	-	V
Reverse current	I _R	I _F =5A T _J =125°C	-	0.27	-	μA
		V _R =40V	-	65	-	
		V _R =50V T _J =25°C	-	-	320	
		T _J =125°C	-	22	-	mA

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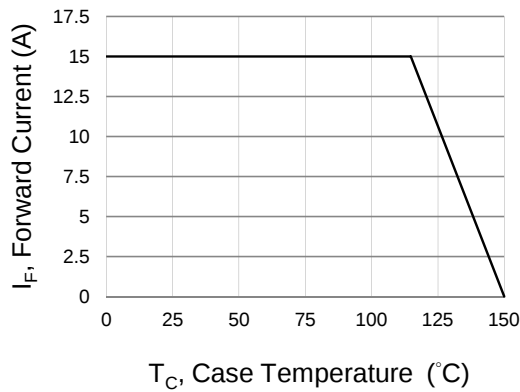


Fig.1 Forward Current Derating Curve

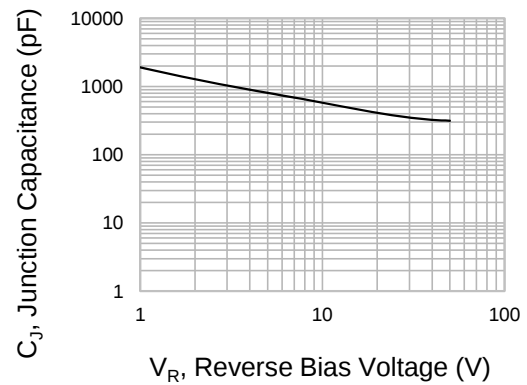


Fig.2 Typical Junction Capacitance

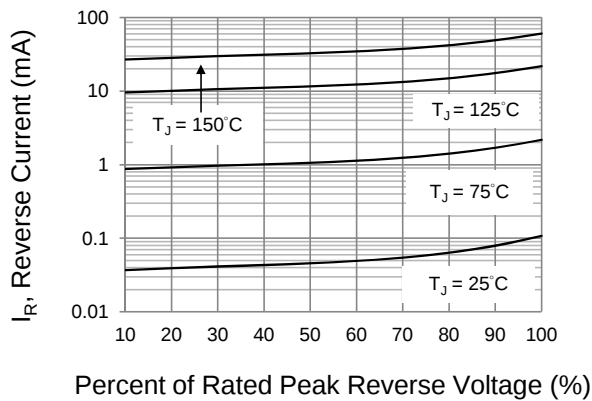


Fig.3 Typical Reverse Characteristics

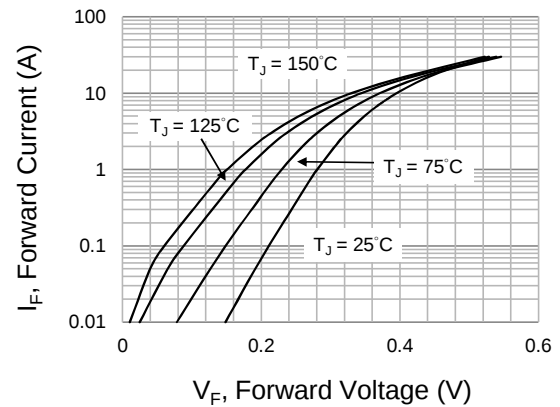


Fig.4 Typical Forward Characteristics

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Part No_packing code_Version

SBM1550USS_AY_00001

SBM1550USS_AY_10001

SBM1550USS_B0_00001

SBM1550USS_B0_10001

SBM1550USS_R2_00001

SBM1550USS_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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