



SBM1045VSS

LOW VF SCHOTTKY RECTIFIER

VOLTAGE 45 Volt **CURRENT** 10 Ampere

DO-201AD

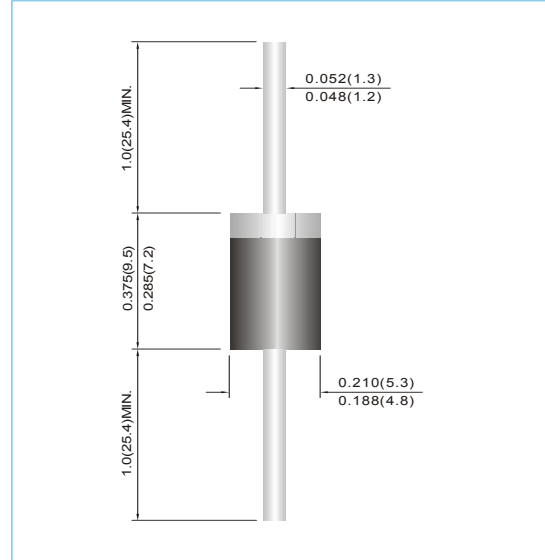
Unit : inch(mm)

FEATURES

- Ideal for automated placement
- Low forward voltage drop, low power losses
- High efficiency operation
- Low thermal resistance
- 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
- Weight: 0.0402 ounces, 1.142 grams



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

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	45	V
Maximum RMS Voltage	V _{RMS}	32	V
Maximum DC Blocking Voltage	V _R	45	V
Maximum Average Rectified Output Current	I _{F(AV)}	10	A
Peak Forward Surge Current : 8.3ms Single Half Sine-Wave Superimposed On Rated Load	I _{FSM}	200	A
Typical Thermal Resistance ,Junction to Ambient	R _{θJA}	38	°C/W
Junction to Lead	R _{θJL}	10	°C/W
Operating Junction Temperature Range And Storage Temperature Range	T _J , T _{STG}	-55 to + 150	°C

- Notes : 1. Test without heat heatsink.
2. Mounted semi-infinite heatsink.

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	45	-	-	V
Instantaneous forward voltage	V _F	I _F =3A I _F =5A I _F =10A T _A =25°C	-	0.34 0.37 0.44	- - 0.47	V
		I _F =3A I _F =5A I _F =10A T _A =125°C	-	0.26 0.32 0.42	- - -	V
		Reverse current	I _R	V _R =36V T _A =25°C	-	0.04
Reverse current	I _R	V _R =45V T _A =25°C	-	0.06	0.3	mA
		T _A =125°C	-	13	-	mA



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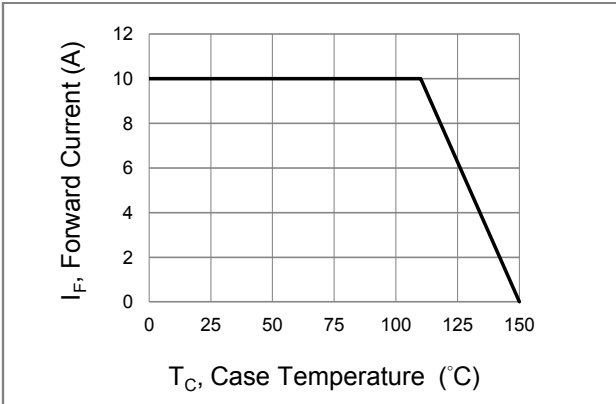


Fig.1 Forward Current Derating Curve

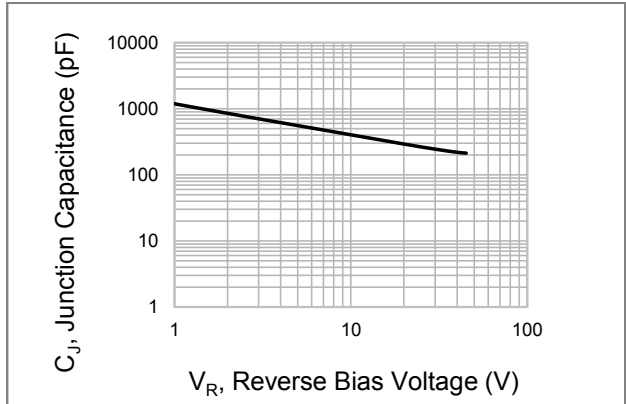


Fig.2 Typical Junction Capacitance

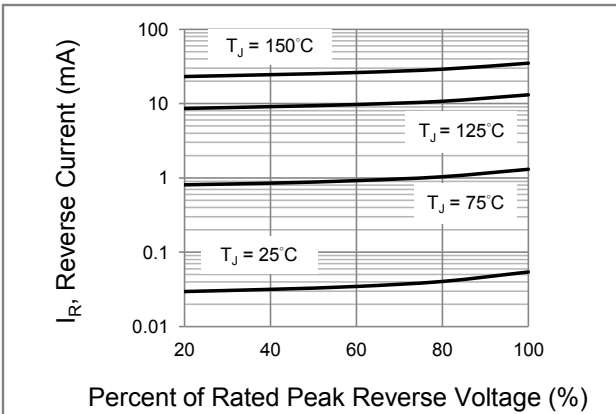


Fig.3 Typical Reverse Characteristics

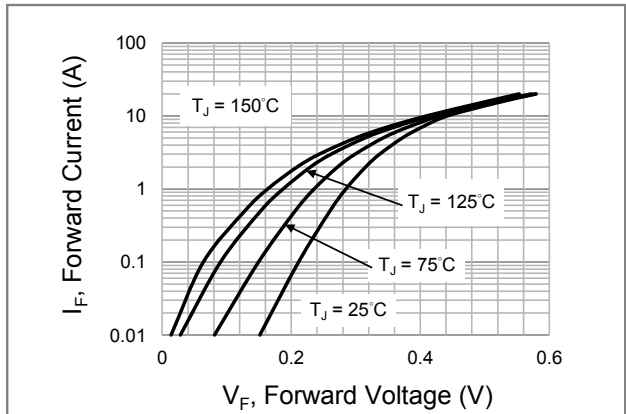


Fig.4 Typical Forward Characteristics

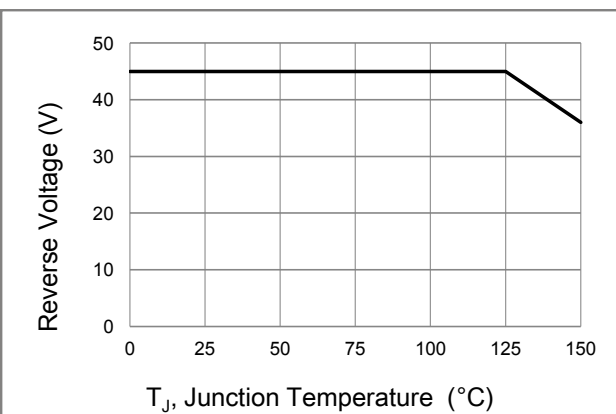


Fig.5 Operating Temperature Derating Curve



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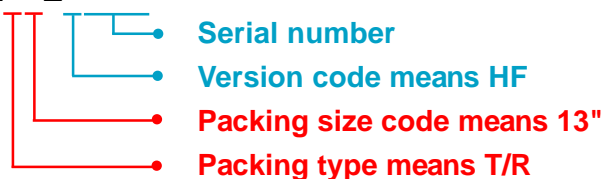
Part No_packing code_Version

SBM1045VSS_AY_00001
 SBM1045VSS_AY_10001
 SBM1045VSS_B0_00001
 SBM1045VSS_B0_10001
 SBM1045VSS_R2_00001
 SBM1045VSS_R2_10001

For example :

RB500V-40_R2_00001

Part No.



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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