



SBM545LSS

ULTRA LOW VF SCHOTTKY RECTIFIER

VOLTAGE 45 Volt **CURRENT** 5 Ampere

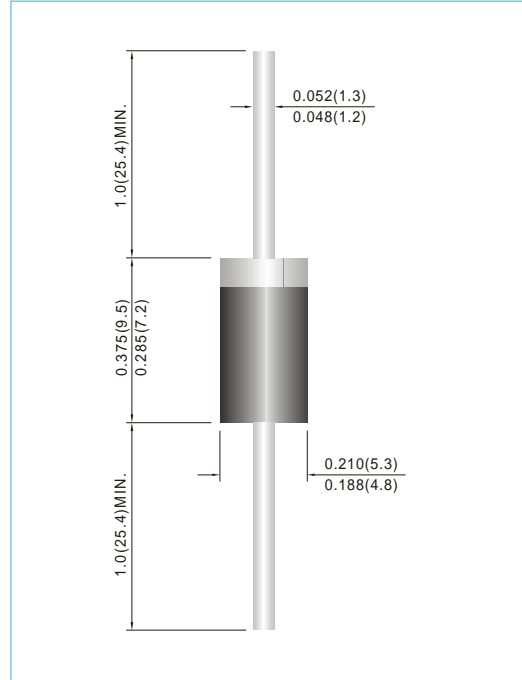
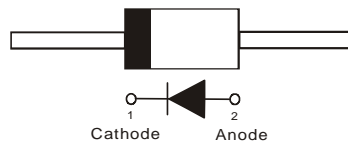
DO-201AD Unit : inch(mm)

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 : DO-201AD Molded Plastic
- Terminals : Axial leads, Solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode
- Weight : 0.04 ounces, 1.142 grams.



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

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	45	V
Maximum rms voltage	V_{RMS}	32	V
Maximum dc blocking voltage	V_R	45	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}	120	A
Typical thermal resistance (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	32 14	$^{\circ}\text{C}/\text{W}$
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. Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5 mm) lead length, P.C.B. mounted with 10cm x 10cm x 2pcs copper pads.



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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}	$I_R=0.5\text{mA}$	45	-	-	V
Instantaneous forward voltage	V_F	$I_F=1\text{A}$	-	0.32	-	V
		$I_F=3\text{A}$	-	0.38	-	
		$I_F=5\text{A}$	-	0.43	0.49	
		$I_F=1\text{A}$	-	0.23	-	V
$I_F=3\text{A}$	-	0.32	-			
Reverse current	I_R	$V_R=36\text{V}$	-	25	-	μA
		$V_R=45\text{V}$	-	-	210	μA
			-	7	-	mA



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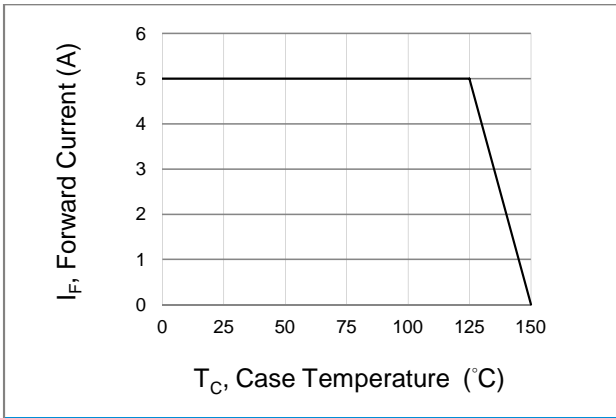


Fig.1 Forward Current Derating Curve

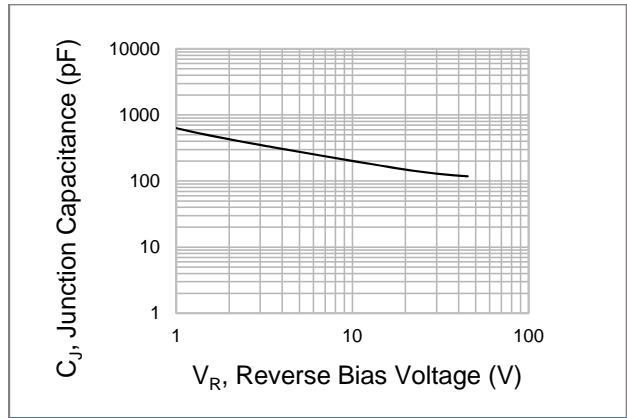


Fig.2 Typical Junction Capacitance

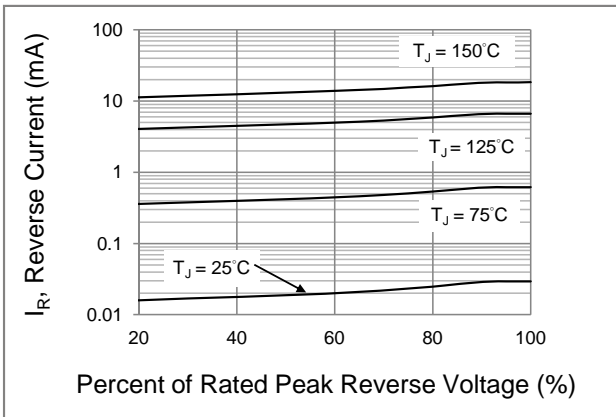


Fig.3 Typical Reverse Characteristics

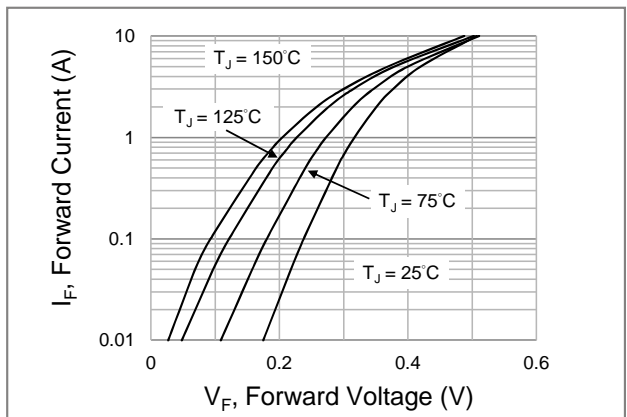


Fig.4 Typical Forward Characteristics

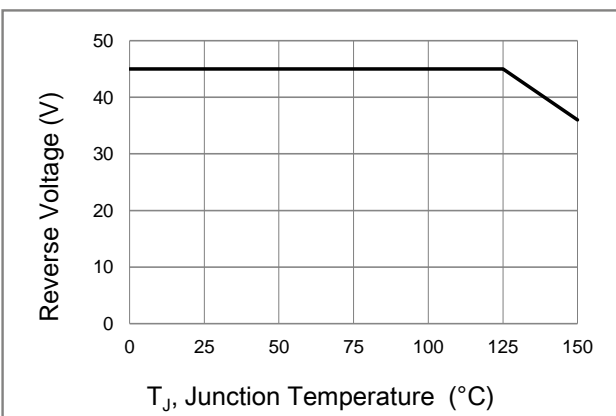


Fig.5 Operating Temperature Derating Curve



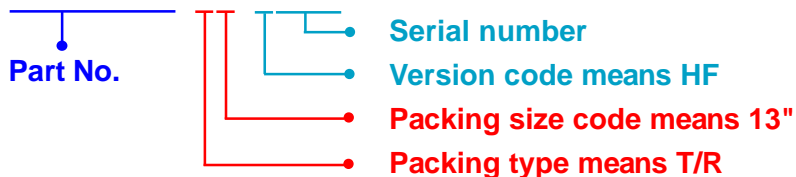
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Part No_packing code_Version

SBM545LSS_AY_00001
 SBM545LSS_AY_10001
 SBM545LSS_B0_00001
 SBM545LSS_B0_10001
 SBM545LSS_R2_00001
 SBM545LSS_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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