



# SBM345VMS

## ULTRA LOW VF SCHOTTKY RECTIFIER

**Voltage**

**45 V**

**Current**

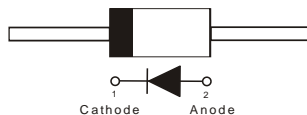
**3 A**

### Features

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

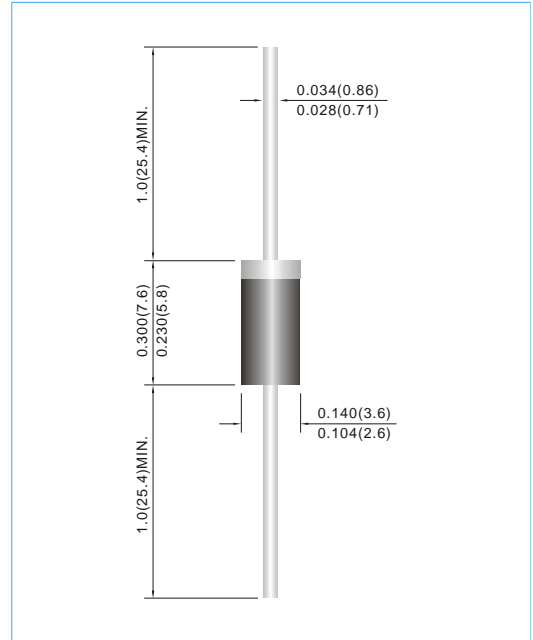
### Mechanical Data

- Case: Molded plastic, DO-15
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Approx. Weight: 0.014 ounces, 0.397 grams
- Marking: Part number



**DO-15**

Unit : inch(mm)



### Maximum Ratings ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	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	$I_{F(AV)}$	3	A	
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	80	A	
Typical thermal resistance	(Note 1)	$R_{\theta JA}$	65	$^{\circ}\text{C/W}$
	(Note 2)	$R_{\theta JC}$	30	
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 pads

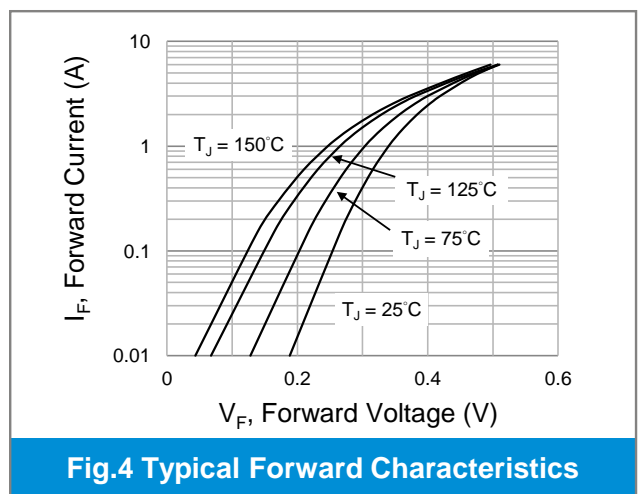
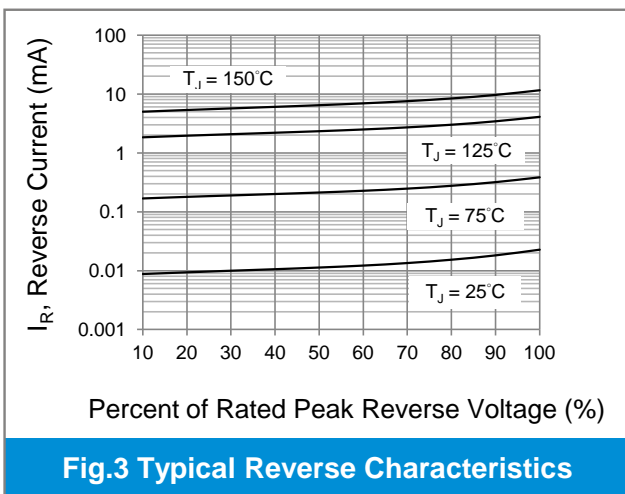
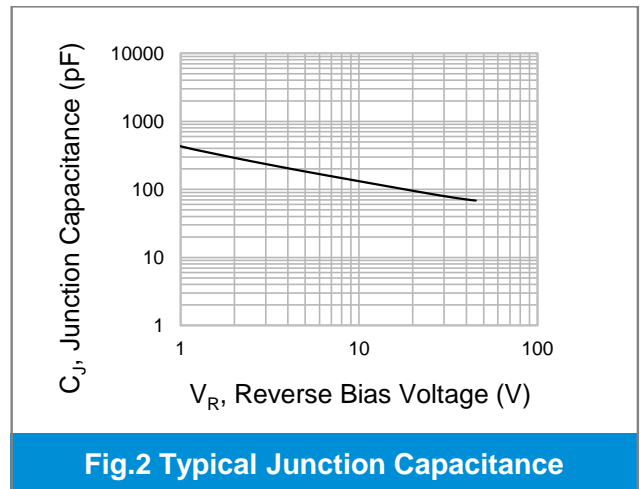
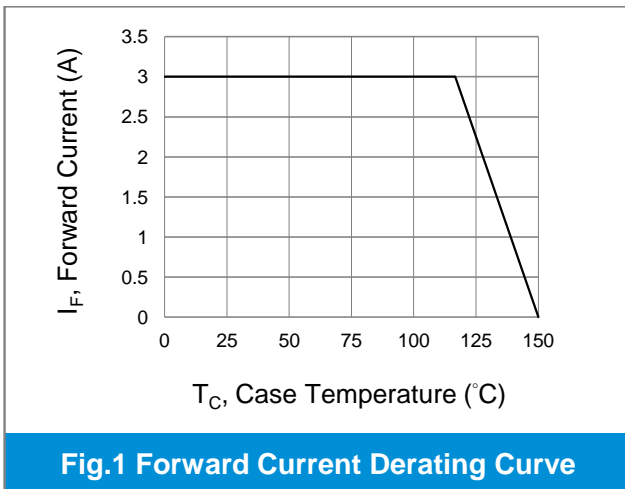
2.The testing condition of the thermal resistance (junction to Case) is based on 10 mm lead length between two 10cm x 10cm copper pads



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

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Breakdown voltage	$V_{BR}$	$I_R=0.5\text{mA}$ $T_J=25^\circ\text{C}$	45	-	-	V
Instantaneous forward voltage	$V_F$	$I_F=1\text{A}$ $I_F=3\text{A}$ $T_J=25^\circ\text{C}$	-	0.34 0.42	- 0.47	V
		$I_F=1\text{A}$ $I_F=3\text{A}$ $T_J=125^\circ\text{C}$	-	0.27 0.38	- -	V
Reverse current	$I_R$	$V_R=36\text{V}$ $T_J=25^\circ\text{C}$	-	16	-	$\mu\text{A}$
		$V_R=45\text{V}$ $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	- -	- 4	60 -	$\mu\text{A}$ mA





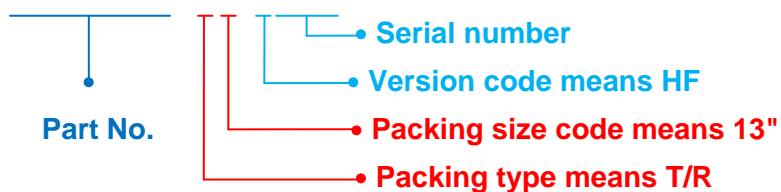
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## Part No\_packing code\_Version

SBM345VMS\_AY\_00001  
 SBM345VMS\_AY\_10001  
 SBM345VMS\_B0\_00001  
 SBM345VMS\_B0\_10001  
 SBM345VMS\_R2\_00001  
 SBM345VMS\_R2\_10001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> 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			



## **SBM345VMS**

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