



# SB340LS

## LOW VF SCHOTTKY RECTIFIER

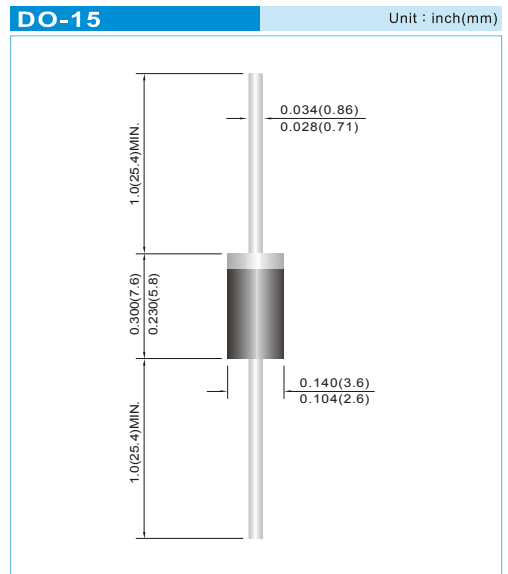
**VOLTAGE** 40 Volt **CURRENT** 3 Ampere

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Low forward voltage drop, low power losses
- High efficiency operation
- Lead free in compliance with EU RoHS 2.0

### MECHANICAL DATA

- Case: DO-15 Molded plastic
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.014 ounces, 0.4 grams



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

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	40	V
Maximum rms voltage	$V_{RMS}$	28	V
Maximum dc blocking voltage	$V_R$	40	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	$I_{FSM}$	150	A
Typical thermal resistance (Note 1)	$R_{\theta JA}$ $R_{\theta JC}$	80 38	$^{\circ}\text{C}/\text{W}$
Operating junction temperature range	$T_J$	-55 to + 150	$^{\circ}\text{C}$
Storage temperature range	$T_{STG}$	-55 to + 150	$^{\circ}\text{C}$

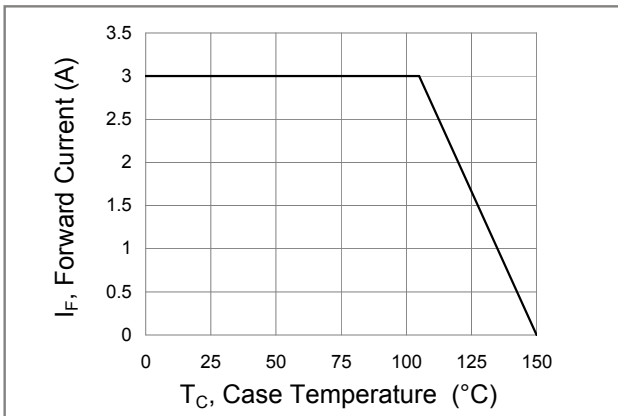
Note : 1. Mounted on 48cm<sup>2</sup> FR-4 PCB.

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

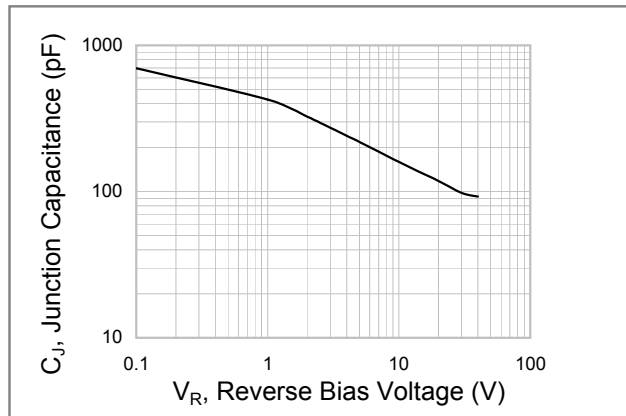
PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT	
Breakdown voltage	$V_{BR}$	$I_R=1\text{mA}$	40	-	-	V	
Instantaneous forward voltage	$V_F$	$T_J=25^{\circ}\text{C}$	$I_F=0.1\text{A}$	-	0.29	-	V
			$I_F=1.5\text{A}$	-	0.39	-	
			$I_F=3\text{A}$	-	0.44	0.46	
		$T_J=125^{\circ}\text{C}$	$I_F=0.1\text{A}$	-	0.14	-	V
			$I_F=1.5\text{A}$	-	0.28	-	
			$I_F=3\text{A}$	-	0.36	-	
Reverse current	$I_R$	$V_R=32\text{V}$	-	15	-	$\mu\text{A}$	
		$V_R=40\text{V}$	$T_J=25^{\circ}\text{C}$ $T_J=125^{\circ}\text{C}$	- -	- 15	60 -	$\mu\text{A}$ mA



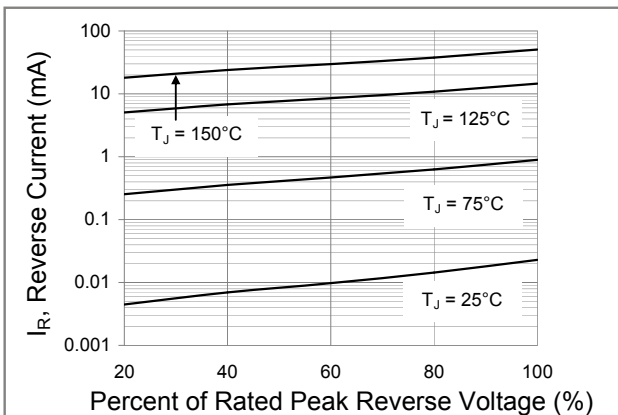
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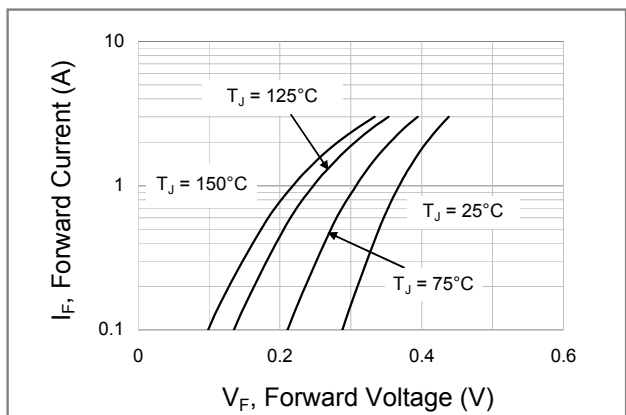
**Fig.1 Forward Current Derating Curve**



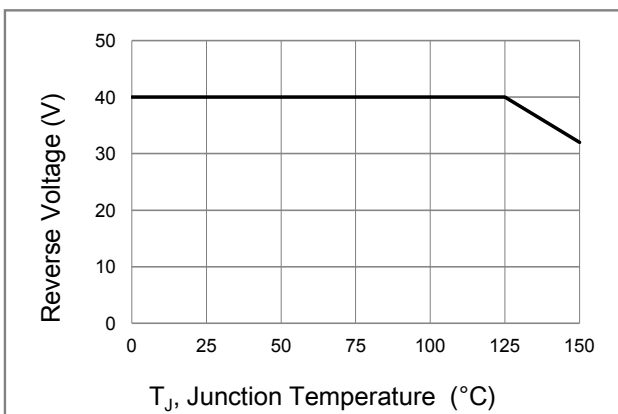
**Fig.2 Typical Junction Capacitance**



**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

- SB340LS\_AY\_00001
- SB340LS\_AY\_10001
- SB340LS\_B0\_00001
- SB340LS\_B0\_10001
- SB340LS\_R2\_00001
- SB340LS\_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)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			



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