



# WEE Technology Company Limited

## Schottky Barrier Rectifiers

### SB540L THRU SB560L

**REVERSE VOLTAGE:** 40 to 60 VOLTS  
**FORWARD CURRENT:** 5.0 AMPERE

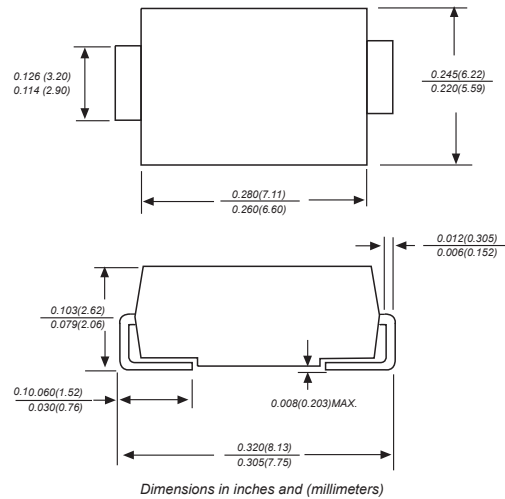
#### FEATURES

- Plastic package has Underwriters Laborator Flammability Classification 94V-0
- For surface mounted application
- High current capacity
- Built-in strain relief
- Low profile package
- Metal to silicon rectifier, majority carrier conductive
- High surge capacity
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, freewheeling, and polarity protection applications
- High temperature soldering : 250°C /10 seconds at terminals

#### MECHANICAL DATA

Case: Molded plastic, DO-214AB(SMC)  
 Terminals: Axial leads, solderable per MIL-STD-750 method 2026 guaranteed  
 Polarity: Color band denotes cathode end  
 Packaging: 12mm tape per EIA STD RS-481  
 Weight: 0.003 ounce, 0.093 gram

#### DO-214AB (SMC)



#### Dimensions in inches and (millimeters)

#### Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

	Symbols	SB540L	SB560L	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	60	Volts
Maximum RMS Voltage	$V_{RMS}$	28	42	Volts
Maximum DC Blocking Voltage	$V_{DC}$	40	60	Volts
Maximum Average Forward Rectified Current at $T_L$ (See Fig. 1)	$I_{(AV)}$	5.0		Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	100		Amp
Maximum Forward Voltage at 5.0A (Note 1)	$V_F$	0.45	0.50	Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	$I_R$	0.5	50	mAmp
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	17		°C/W
Operating Junction Temperature Range	$T_J$	-55 to +125		°C
Storage Temperature Range	$T_{stg}$	-55 to +150		°C

#### NOTES:

- 1- Pulse test: 300µs pulse width, 1% duty cycle
- 2- P.C.B. mounted with 0.3 x 0.3" (8.0 x 8.0mm) Copper Pad Areas

**We Enhance Efficiency**

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## SB540L THRU SB560L

### RATINGS AND CHARACTERISTIC CURVES

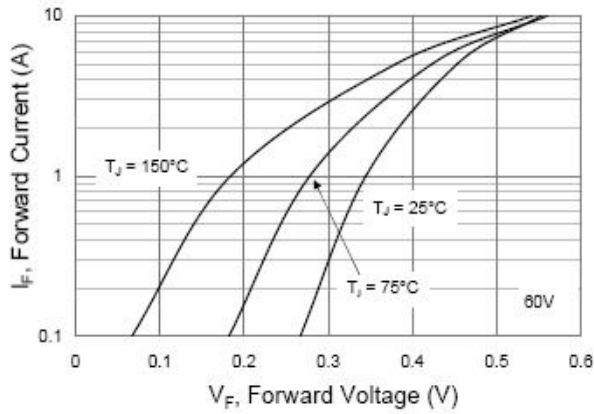


Fig.1 Typical Forward Characteristics

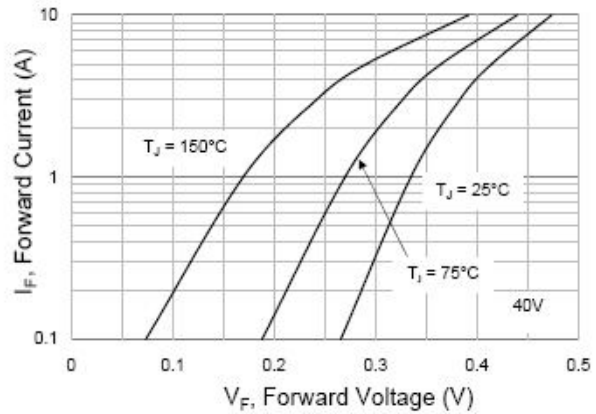


Fig.2 Typical Forward Characteristics

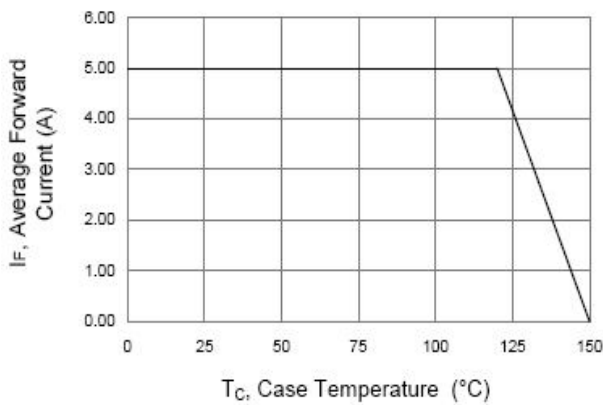


Fig.3 Forward Current Derating Curve

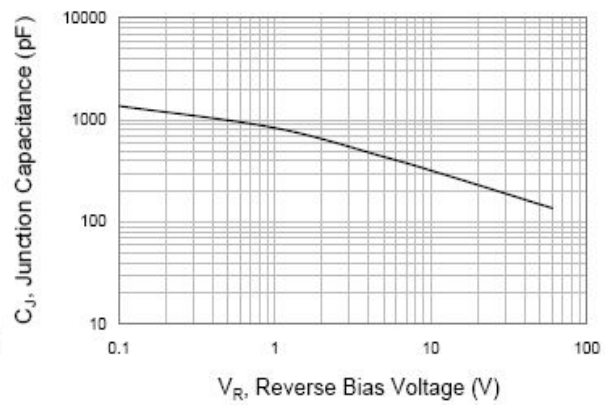


Fig.4 Typical Junction Capacitance under Bias

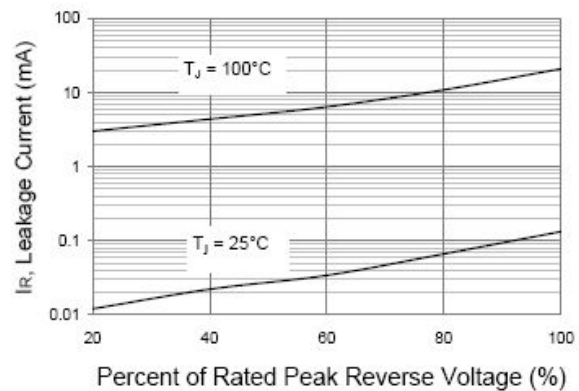


Fig.5 Typical Reverse Characteristics

Note: Specifications are subject to change without notice. For more detail and update, please visit our website.