

## 1.Features

- The plastic package carries Underwriters
- Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed:  
250°C/10 seconds at terminals

## 2.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 current derate by 20%.

Parameter		Symbols	SS 52B	SS 53B	SS 54B	SS 55B	SS 56B	SS 58B	SS 510B	SS 5150B	SS 5200B	Units
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage		V <sub>RMS</sub>	14	21	28	35	42	56	70	105	150	V
Maximum DC Blocking Voltage		V <sub>DC</sub>	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current At TL(See Fig.1)		I <sub>(AV)</sub>	5									A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC Method)		I <sub>FSM</sub>	150									A
Maximum Instantaneous Forward Voltage At 3A		V <sub>F</sub>	0.55			0.7		0.85			0.95	V
Maximum DC Reverse Current At Rated DC Blocking Voltage	T <sub>A</sub> =25°C	I <sub>R</sub>	0.5						0.2		mA	
	T <sub>A</sub> =100°C		20			10		2		mA		
Typical Junction Capacitance (NOTE 1)		C <sub>J</sub>	200									pF
Typical Thermal Resistance (NOTE 2)		R <sub>θJA</sub>	55									°C/W
Operating Junction Temperature Range		T <sub>J</sub>	-50 to +125					-50 to +150				°C
Storage Temperature Range		T <sub>STG</sub>	-50 to +150									°C

Note:

- 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
- 2.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas



Reverse Voltage - 20 to 200 Volts Forward Current - 5.0 Amperes

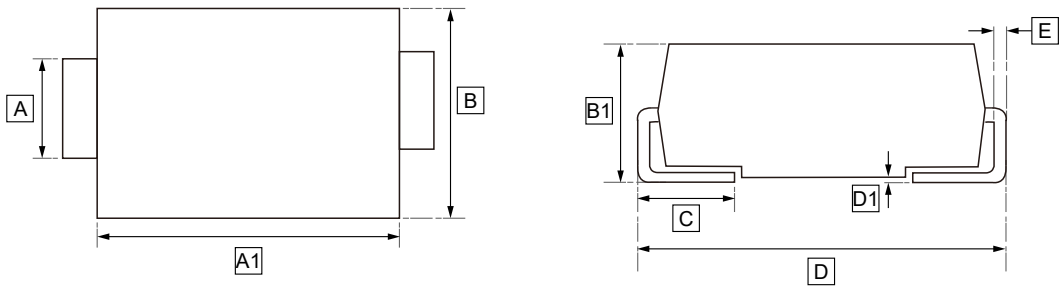
3. Typical Characteristic

Figure 1: Forward Current Derating Curve	Figure 2: Maximum Non-repetitive Peak Forward Surge Current
Figure 3: Typical Instantaneous Forward Characteristics	Figure 4: Typical Reverse Characteristics
Figure 5: Typical Junction Capacitance	Figure 6: Typical Transient Thermal Impedance



Reverse Voltage - 20 to 200 Volts Forward Current - 5.0 Amperes

4.SMB Package Outline Dimensions



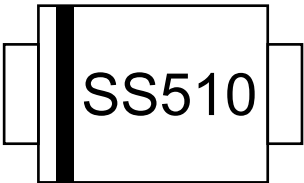
DIMENSIONS (mm are the original dimensions)

Symbol	A	A1	B	B1	C	D	D1	E
Min	1.80	4.06	3.30	2.13	0.76	5.21	-	0.152
Max	2.20	4.57	3.94	2.44	1.52	5.59	0.203	0.305



Reverse Voltage - 20 to 200 Volts Forward Current - 5.0 Amperes

5.Ordering information



Order Code	Marking	Package	Base QTY	Delivery Mode
UMW SS52B	SS52	SMB	3000	Tape and reel
UMW SS54B	SS54	SMB	3000	Tape and reel
UMW SS56B	SS56	SMB	3000	Tape and reel
UMW SS58B	SS58	SMB	3000	Tape and reel
UMW SS510B	SS510	SMB	3000	Tape and reel
UMW SS512B	SS512	SMB	3000	Tape and reel
UMW SS515B	SS515	SMB	3000	Tape and reel
UMW SS520B	SS520	SMB	3000	Tape and reel



## 6.Disclaimer

UMW reserves the right to make changes to all products, specifications. Customers should obtain the latest version of product documentation and verify the completeness and currency of the information before placing an order.

When applying our products, please do not exceed the maximum rated values, as this may affect the reliability of the entire system. Under certain conditions, any semiconductor product may experience faults or failures. Buyers are responsible for adhering to safety standards and implementing safety measures during system design, prototyping, and manufacturing when using our products to prevent potential failure risks that could lead to personal injury or property damage.

Unless explicitly stated in writing, UMW products are not intended for use in medical, life-saving, or life-sustaining applications, nor for any other applications where product failure could result in personal injury or death. If customers use or sell the product for such applications without explicit authorization, they assume all associated risks.

When reselling, applying, or exporting, please comply with export control laws and regulations of China, the United States, the United Kingdom, the European Union, and other relevant countries, regions, and international organizations.

This document and any actions by UMW do not grant any intellectual property rights, whether express or implied, by estoppel or otherwise. The product names and marks mentioned herein may be trademarks of their respective owners.