



### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 to 100 Volt CURRENT 1 Ampere

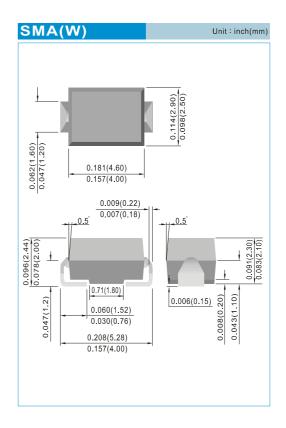
### **FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- · Low power loss, high efficiency
- High surge capacity
- High current capacity, low V<sub>F</sub>
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### **MECHANICAL DATA**

- Case: JEDEC SMA(W) molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.0024 ounces, 0.0679 grams





### **MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load.

PARAMETER	SYMBOL	SS12W	SS13W	SS14W	SS15W	SS16W	SS18W	SS19W	S100W	UNITS
Maximum Recurrent Peak Reverse Voltage		20	30	40	50	60	80	90	100	٧
Maximum RMS Voltage		14	21	28	35	42	56	63	70	٧
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	90	100	٧
Maximum Average Forward Current at T <sub>L</sub> =75°C	I <sub>F(AV)</sub>	1						А		
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	30							А	
Maximum Forward Voltage at 1A (Note 1)	V <sub>F</sub>	0.5 0.7			0.85			٧		
Maximum DC Reverse Current at Rated DC Blocking $T_J=25^{\circ}\text{C}$ Voltage $T_J=100^{\circ}\text{C}$	I <sub>R</sub>	0.5 50			0.5 20		mA			
Typical Thermal Resistance (Note 2)	$R_{_{\theta JA}}$	28 88					°C / W			
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +125 -55 to +150					°C			
Storage Temperature Range	T <sub>STG</sub>	-55 to +150					°C			

#### NOTES:

- 1.Pulse Test with PW =300µsec, 1% Duty Cycle.
- 2. Mounted on P.C. Board with  $5 \text{mm}^2$  (0.013 mm thick) copper pad areas.





### RATING AND CHARACTERISTIC CURVES

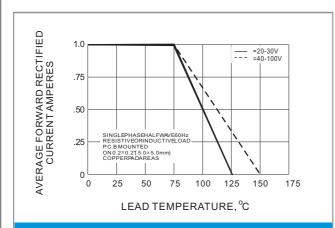


Fig.1 FORWARD CURRENT DERATING CURVE

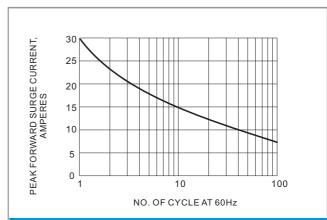


Fig.2 MAXIMUM NON-REPETITIVEPEAKFORWARD SURGE CURRENT

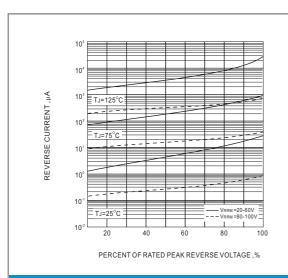


Fig.3 TYPICAL REVERSE CHARACTERISTIC

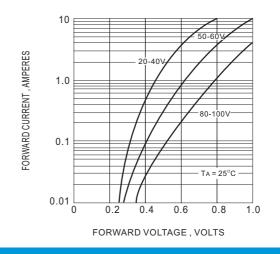
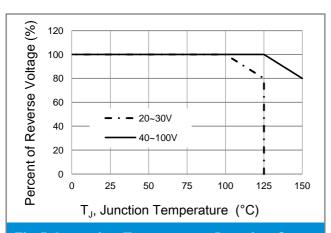


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

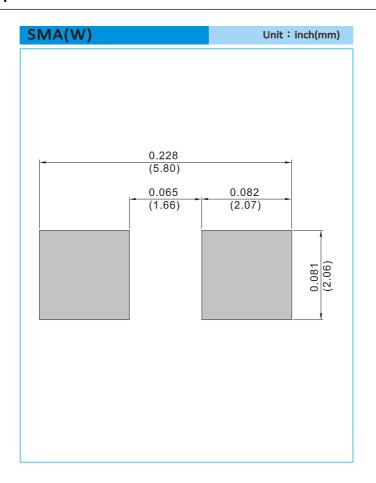


**Fig.5 Operating Temperature Derating Curve** 





## MOUNTING PAD LAYOUT



## **ORDER INFORMATION**

• Packing information

T/R - 7.5K per 13" plastic Reel

T/R - 1.8K per 7" plastic Reel

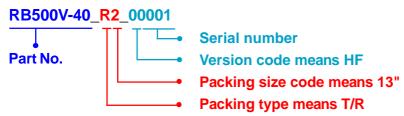




## Part No\_packing code\_Version

SS12W\_R1\_00001 SS12W\_R2\_00001

## For example:



Packing Code XX					Version Code XXXXX					
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)	Α	N/A	0	HF	0	serial number				
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number				
Bulk Packing (B/P)	В	13"	2							
Tube Packing (T/P)	Т	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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