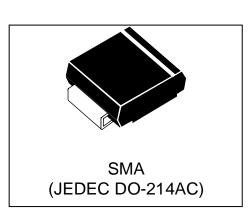


# WSRxx03A

#### SCHOTTKY BARRIER RECTIFIERS

### **Features**

- 3A Schottky barrier diode
- Schottky barrier rectifier
- Guarding protection
- Low forward voltage
- Reverse energy tested
- High current capability
- Extremely low thermal resistance
- RoHS Compliant & HF
- Device meets MSL1 requirement





### **Mechanical Data**

- Case: SMA(JEDECDO-214AC), molded plastic body
- Mounting position: any
- Polarity: Color band denotes cathode end

### Absolute Maximum Ratings and Electronics characteristics

Ratings@25°C ambient temperature unless otherwise specified

Parameter	Symbol	WSR4003A WSR10003A WSR10003A		WSR15003A	WSR20003A	UNITS	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	40	60	100	150	200	V
Maximum RMS voltage	V <sub>RMS</sub>	28	42	70	105	140	V
Maximum DC blocking voltage	$V_{DC}$	40	60	100	150	200	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	3.0			Α		
Peak forward surge current 8.3mssingle half-sine-wave	I <sub>FSM</sub>	70			А		
Maximum instantaneous forward voltage at IF=3.0A	VF	0.55	5 0.75 0.85 0.95		95	V	
Maximum DC reverse current (Ta= 25°C) At rated DC blocking voltage (Ta=100°C)	I <sub>R</sub>	0.5 10		0.3 5			mA
Typical thermal resistance(junction to ambient)	RθJA	70				°C/W	
Operating temperature range	TJ	-55 ~ +125				$^{\circ}$	
Storage temperature range	T <sub>STG</sub>	-55 ~ +150				$^{\circ}$	

Typical characteristics (Ta=25°C, unless otherwise noted)

Fig. 1 - PEAK FORWARD SURGE CURRENT

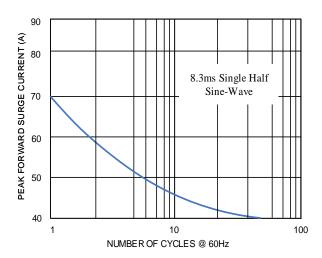


Fig.3 Typical Forward Characteristic

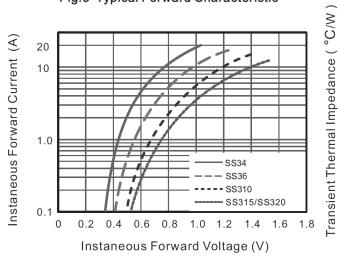


Fig. 2 - FORWARD CURRENT DERATING CURVE

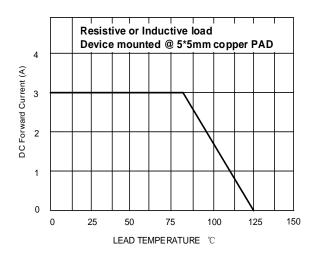
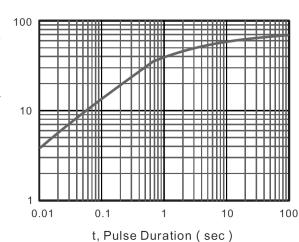


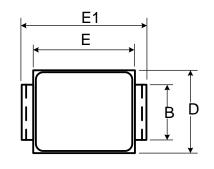
Fig.4- Typical Transient Thermal Impedance

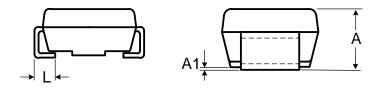


Note: The above typical parameters or typical characteristics are only indicative and do not make specific guarantees. If detailed values are required, additional communication and provision are required.

## **Outline Drawing**

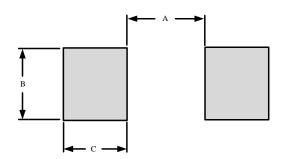
Ref. (mm)	Millimeters		
	Min.	Max.	
Α	1.900	2.300	
A1	-	0.300	
В	1.250	1.650	
E	3.950	4.750	
E1	4.700	5.280	
D	2.300	2.830	
L	0.760	1.520	





### Recommended Solder Pad Layout

DIM(mm)	MILLIMETERS		
А	2.30		
В	1.80		
С	2.10		



## Marking Code

Part Num	ber	WSR4003A	WSR6003A	WSR10003A	WSR15003A	WSR20003A
Marking C	ode	SS34	SS36	SS310	SS315	SS320

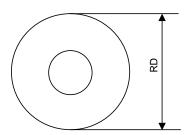
## Package Information

**Tape & Reel**: 5000 pcs.

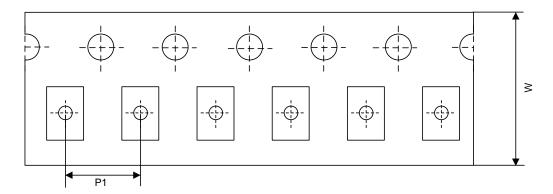
# Tape and Reel Information

RD	Reel Dimensions	13 inch
W	Overall width of the carrier tape	12 mm
P1	Pitch between successive cavity centers	4 mm

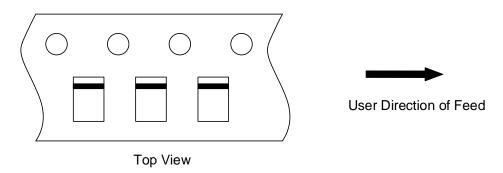
#### Reel Dimensions Schematic diagram



Tape Dimensions Schematic diagram



### Quadrant Assignments for PIN1 Orientation in tape



#### **Contact Information**

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WAYON website: http://www.way-on.com

For additional information, please contact your local Sales Representative.

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### **Product Specification Statement**

The product specification aims to provide users with a reference regarding various product parameters, performance, and usage. It presents certain aspects of the product's performance in graphical form and is intended solely for users to select product and make product comparisons, enabling users to better understand and evaluate the characteristics and advantages of the product. It does not constitute any commitment, warranty, or guarantee.

The product parameters described in the product specification are numerical values, characteristics, and functions obtained through actual testing or theoretical calculations of the product in an independent or ideal state. Due to the complexity of product applications and variations in test conditions and equipment, there may be slight fluctuations in parameter test values. WAYON shall not guarantee that the actual performance of the product when installed in the customer's system or equipment will be entirely consistent with the product specification, especially concerning dynamic parameters. It is recommended that users consult with professionals for product selection and system design. Users should also thoroughly validate and assess whether the actual parameters and performance when installed in their respective systems or equipment meet their requirements or expectations. Additionally, users should exercise caution in verifying product compatibility issues, and WAYON assumes no responsibility for the application of the product.

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