

# SHANGHAI SUNRISE ELECTRONICS CO., LTD.

## RS2AA THRU RS2MA SURFACE MOUNT FAST SWITCHING RECTIFIER

TECHNICAL SPECIFICATION

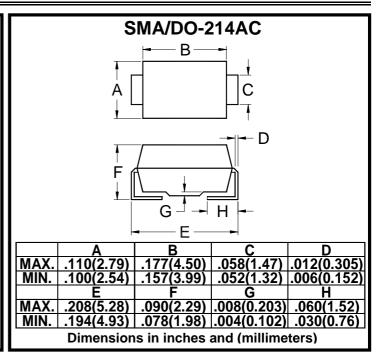
VOLTAGE: 50 TO 1000V CURRENT: 2.0A

#### **FEATURES**

- Ideal for surface mount pick and place application
- Low profile package
- Built-in strain relief
- High surge capability
- Glass passivated chip
- Fast recovery for high efficiency
- High temperature soldering guaranteed: 260°C/10sec/at terminal

#### **MECHANICAL DATA**

- Terminal: Plated leads solderable per MIL-STD 202E, method 208C
- Case: Molded with UL-94 Class V-O recognized flame retardant epoxy
- Polarity: Color band denotes cathode



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Single-phase, half-wave, 60Hz, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

RATINGS	SYMBOL	RS2	RS2	RS2	RS2	RS2	RS2	RS2	UNITS	
	OTMBOL	AA	BA	DA	GA	JA	KA	MA	014110	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Curre (T <sub>L</sub> =110°C)	nt I <sub>F(AV)</sub>	2.0							А	
, _ ,										
Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load)	I <sub>FSM</sub>	50						Α		
Maximum Instantaneous Forward Voltage (at rated forward current)	V <sub>F</sub>				1.3				V	
Maximum DC Reverse Current $T_a=25$	l D	5.0 200							μA	
(at rated DC blocking voltage) T <sub>a</sub> =125	°C								μΑ	
Maximum Reverse Recovery Time (Note	1) trr	150 250 500			00	nS				
Typical Junction Capacitance (Note	2) C <sub>J</sub>	30						pF		
Typical Thermal Resistance (Note	3) $R_{\theta}(ja)$	16						°C/W		
Storage and Operation Junction Temperatur	e T <sub>STG</sub> ,T <sub>J</sub>	-50 to +150						°C		
Note:										

- Note:
- 1.Reverse recovery condition I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A,Irr=0.25A.
- 2.Measured at 1.0 MHz and applied voltage of  $4.0V_{\rm dc}$
- 3. Thermal resistance from junction to terminal mounted on 5×5mm copper pad area