

# SURFACE MOUNT GLASS PASSIVATED RECTIFIER S2AA THRU S2MA

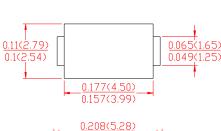
VOLTAGE RANGE50 to 1000 VoltsForward Current2.0 Amperes

#### FEATURES

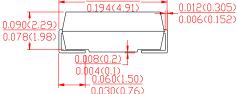
- I Plastic package has UL Flammability Classification 94V-0
- I For surface mount applications
- I Low profile package
- Built-in strain relief, ideal for automated placement
- I Glass Passivated chip junction
- High temperature soldering:
  - 250 °C/10 seconds at terminals

#### MECHANICAL DATA

- Case: JEDED SMA (DO-214AC) molded plastic body
- I Terminals: Solder Plated, solderable per MIL-STD-750 Method 2026
- I Polarity: Color band denoles cathode end
- Weight: 0.002ounce, 0.064gram



SMA(DO-214AC)



Dimensions in inches and (millimeters)

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

		SYMBOLS	S2AA	S2BA	S2DA	S2GA	S2JA	S2KA	S2MA	UNITS
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at $T_L\!\!=\!\!100^\circ\!\!\mathbb{C}$		I <sub>(AV)</sub>	2.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) $T_L{=}100^\circ\!C$		I <sub>FSM</sub>	50							Amps
Maximum Instantaneous reverse of 1.5A		V <sub>F</sub>	1.15							Volts
Maximum instantaneous Reverse Current at rated DC blocking voltage	T <sub>A</sub> =25 °C	I <sub>R</sub>	1.0							μΑ
	T <sub>A</sub> =125 °C		125							
Typical thermal Resistance (Note 1)		R <sub>QJA</sub> R <sub>QJA</sub>	53 16							°C/W
Operating and Storage Temperature Range		TJ	-55 to +150							°C
Typical reverse recovery time at $I_F=0.5A, I_R=1.0A, I_{\pi}=0.25A$		T <sub>rr</sub>	2.0							μS
Typical junction capacitance at 4.0V,1MHz		CJ	30							PF
Storage temperature range		T <sub>STG</sub>	-55 to +150							°C

#### NOTES:

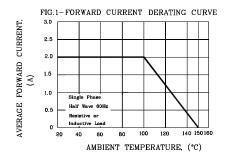
1. Thermal resistance from junction to ambient and from junction to lead mounted on 2. P.C.B. Mounted with  $0.3 \times 0.3$ " ( $8.0 \times 8.0$ mm) copper pad areas.



### SURFACE MOUNT GLASS PASSIVATED RECTIFIER S2AA THRU S2MA

VOLTAGE RANGE 50 to 1000 Volts 2.0 Amperes **Forward Current** 

## RATING AND CHRACTERISTIC CURVES S2A Thur S2M



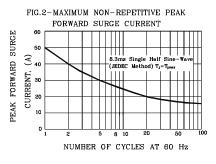


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

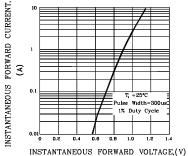


FIG.4-TYPICAL REVERSE CHARACTERISTICS

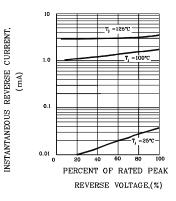


FIG.4-TYPICAL JUNCTION CAPACITANCE

