# S2AA THRU S2MA

### SURFACE MOUNT GLASS PASSIVATED JUNCTION RECTIFIER

# **FEATURES:**

- For surface mounted applications
- Low profile package
- Built-in stain relief
- Easy pick and place
- Flammability Classification
- High temperature soldering:
  250°C /10 second at terminals

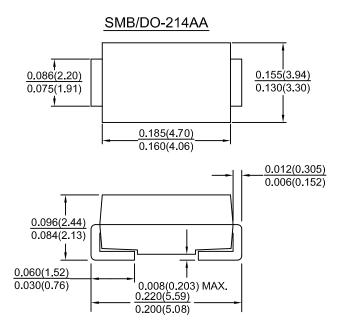
# MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic Terminals: Solder plated solderable per MIL-STD-750, Method 2026

Polarity: Indicated by cathode band

Standard Packaging: Any

Welght: 0.003 ounces, 0.093 grams



Dimensions in inches and (millimeters)

# MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temp. unless otherwise specified.

Single phase, half sine wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20 %.

Characteristic	Symbol	S2AA	S2BA	S2DA	S2GA	S2JA	S2KA	S2MA	Units
Maximum recurrent peak reverse voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at T $_{\rm L}$ = 100 $^{\circ}{\rm C}$	lo	2.0							Amps
Peak forward surge current, 8.3ms single half sine-wave auperimposed on rated load(JEDEC Methed)	I FSM	50							Amps
Maximum instantaneous forward voltage drop per leg at 2.0A	v <sub>F</sub>	1.1							Volts
$\begin{array}{ll} \mbox{Maximum DC reverse current} & \mbox{Ta}{=}25^{\circ}\mbox{C} \\ \mbox{at rated DC blocking voltage} & \mbox{Ta}{=}125^{\circ}\mbox{C} \end{array}$	I <sub>R</sub>	5.0 125							μ Α
Typical junction Capacitance (NOTE 2)	င၂	30						PF	
Maximum reverse recovery time(NOTE 1)	TRR	2.5						μs	
Typical thermal resistance (NOTE 3)	Rth JL	16						°C/W	
Operating Junction and storage temperature range	T <sub>J</sub> , Tstg	-55 to+150							${\mathbb C}$

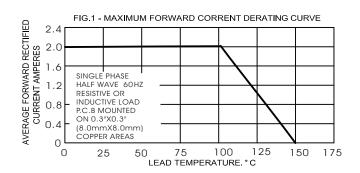
#### NOTE:

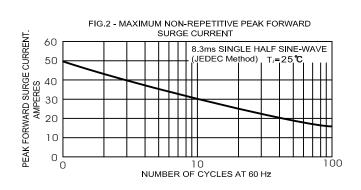
- 1. Reverse recovery test connditions:  $I_F = 0.5A$ ,  $I_R = 1.0A$ ,  $I_{RR} = 0.25A$
- 2. Measured at 1 MHZ and applied reverse voltage of 4.0 volTS
- 3.. Thermal resistance from junction to lead mounted on 0.2 x 0.2"(5.0mm x 5.0mm)

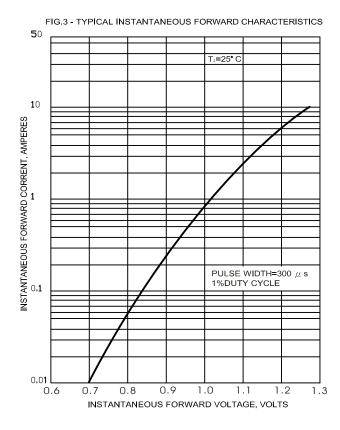


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# RATINGS AND CHARACTERISTIC CURVES







#### FIG.4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

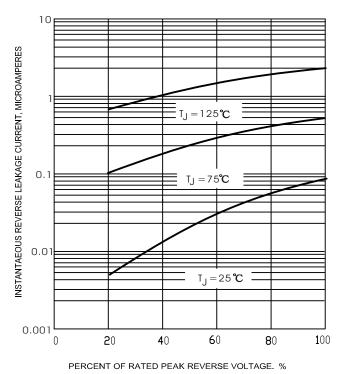
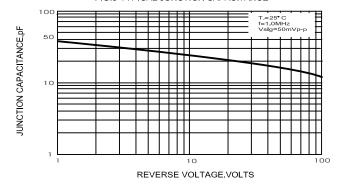
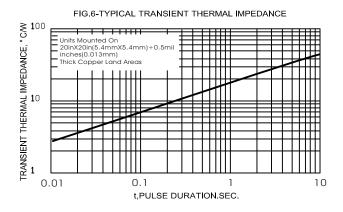


FIG.5-TYPICAL JUNCTION CAPACITANCE





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