

## S2A THRU S2M

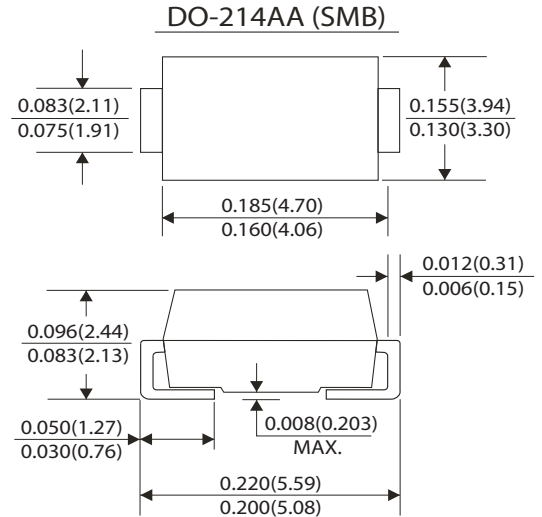
CURRENT 2.0 Amperes  
VOLTAGE 50 to 1000 Volts

### Features

- For surface mounted applications
- Glass passivated junction
- Low profile package
- Built-in strain relief, ideal for automated placement
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature soldering guaranteed: 350 °C/10 second, at terminals

### Mechanical Data

- Case : JEDEC SMB(DO-214AA) molded plastic body
- Terminals : Plated axial lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.003 ounce, 0.093 gram



Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics

(Ratings at 25 °C ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

	Symbols	S2A	S2B	S2D	S2G	S2J	S2K	S2M	Units
Maximum recurrent 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 <sub>L</sub> =100 °C	I <sub(av)< sub=""></sub(av)<>	2.0							Amps
Peak forward surge current 8.3ms half sine wave superimposed on rated load (JEDEC method) T <sub>L</sub> =100 °C	I <sub>FSM</sub>	50.0							Amps
Maximum instantaneous forward voltage at 2.0A	V <sub>F</sub>	1.15							Volts
Maximum reverse current at rated voltage	T <sub>A</sub> =25 °C	1.0							μA
	T <sub>A</sub> =125 °C	125							
Typical thermal resistance (Note 2)	R <sub>θJL</sub>	16.0							°C/W
	R <sub>θJA</sub>	53.0							
Typical reverse capacitance (Note 3)	t <sub>rr</sub>	2.0							μS
Typical junction capacitance (Note 1)	C <sub>J</sub>	30.0							pF
Operating and Storage temperature Range	T <sub>J</sub> T <sub>STG</sub>	-55 to +150							°C

#### Notes:

- (1) Measured at 1MHz and applied reverse voltage of 4.0V dc.
- (2) Thermal resistance from junction to ambient and from junction to lead mounted on 0.2 × 0.2" (0.5 × 0.5mm) copper pad areas.
- (3) Reverse recovery test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=0.25A



# RATINGS AND CHARACTERISTIC CURVES S2A THRU S2M

FIG.1-FORWARD CURRENT DERATING CURVE

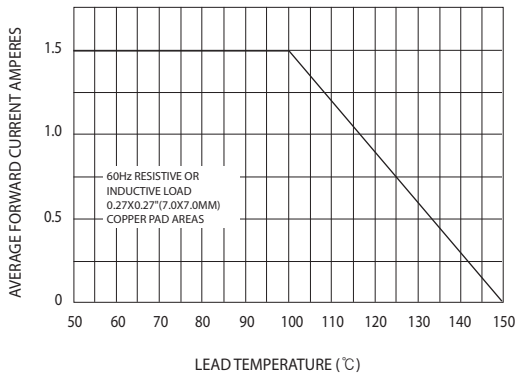


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

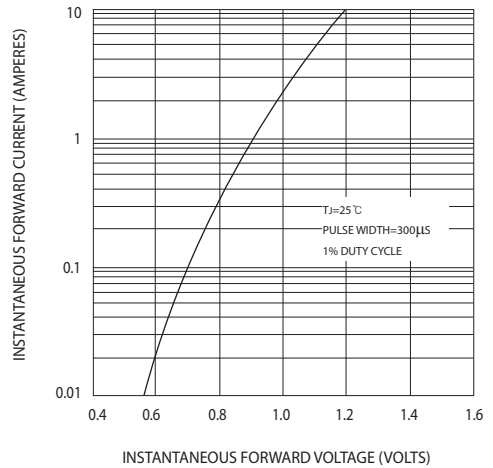


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

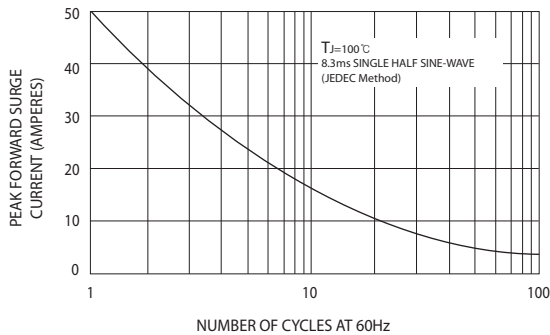


FIG.4-TYPICAL REVERSE CHARACTERISTICS

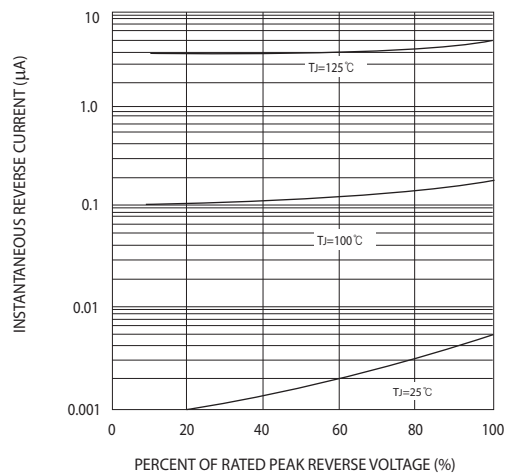


FIG.5-TYPICAL JUNCTION CAPACITANCE

