

S2A THRU S2M

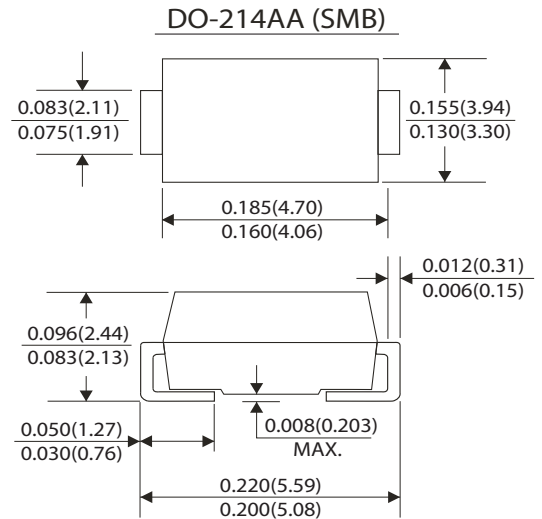
CURRENT 2.0 Amperes
VOLTAGE 50 to 1000 Volts

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 _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage		V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage		V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at T _L =100 °C		I _(AV)	2.0							Amps
Peak forward surge current 8.3ms half sing wave superimposed on rated load (JEDEC method) T _L =100 °C		I _{FSM}	50.0							Amps
Maximum instantaneous forward voltage at 2.0A		V _F	1.15							Volts
Maximum reverse current at rated voltage	T _A =25 °C	I _R	1.0							μA
	T _A =125 °C		125							
Typical thermal resistance (Note 2)		R _{θJL} R _{θJA}	16.0 53.0							°C /W
Typical reverse capacitance (Note 3)		t _{rr}	2.0							μS
Typical junction capacitance (Note 1)		C _J	30.0							pF
Operating and Storage temperature Range		T _J T _{STG}	-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_F=0.5A, I_R=1.0A, I_{rr}=0.25A



RATINGS AND CHARACTERISTIC CURVES S2A THRU S2M

FIG.1-FORWARD CURRENT DERATING CURVE

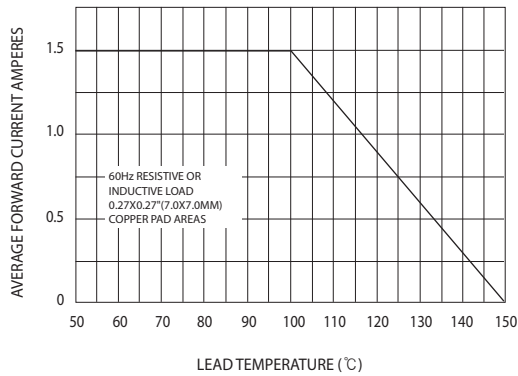


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

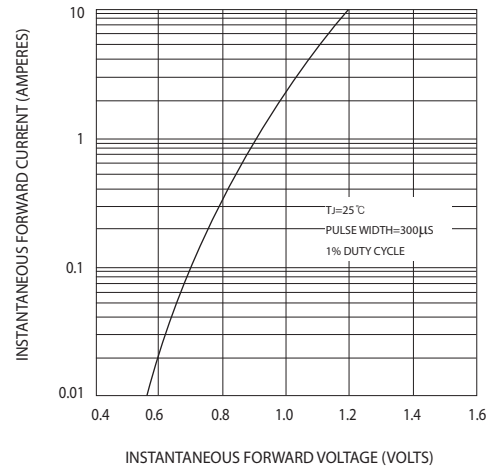


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

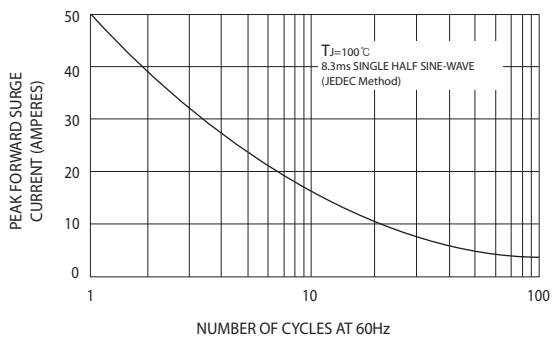


FIG.4-TYPICAL REVERSE CHARACTERISTICS

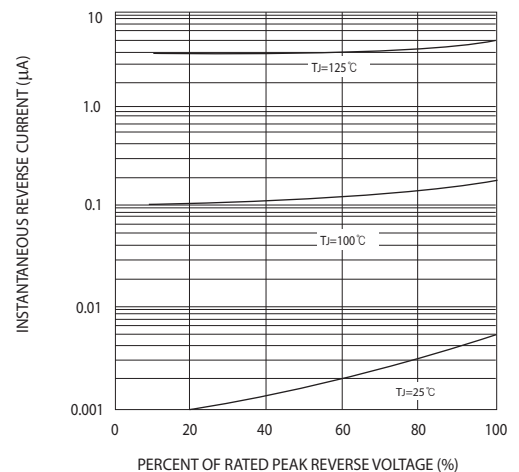


FIG.5-TYPICAL JUNCTION CAPACITANCE

