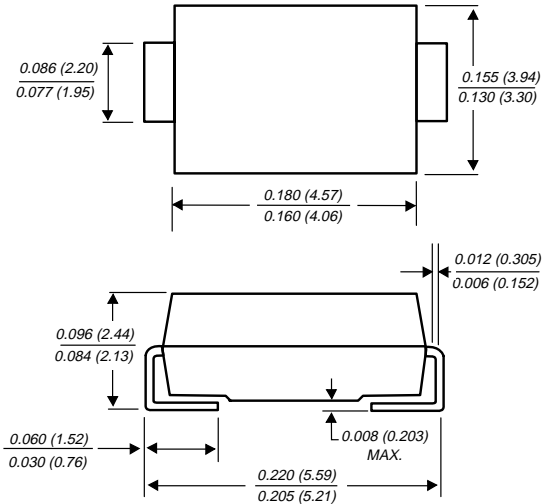


S2A THRU S2M

SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.5 Amperes

DO-214AA MODIFIED J-BEND



Dimensions in inches and (millimeters)

FEATURES

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



MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic body over passivated chip

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Weight: 0.003 ounce, 0.093 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	S2A	S2B	S2D	S2G	S2J	S2K	S2M	UNITS
Device marking code		SA	SB	SD	SG	SJ	SK	SM	
Maximum repetitive 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 blocking voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at T _L =100°C	I _(AV)	1.5							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) T _L =100°C	I _{FSM}	50.0							Amps
Maximum instantaneous forward voltage at 1.5 A	V _F	1.15							Volts
Maximum DC reverse current at Rated DC blocking voltage T _A =25°C T _A =125°C	I _R	1.0 125.0							μA
Typical reverse recovery time (NOTE 1)	t _{rr}	2.0							μs
Typical junction capacitance (NOTE 2)	C _J	30.0							pF
Typical thermal resistance (NOTE 3)	R _{θJA} R _{θJL}	53.0 16.0							°C/W
Operating and storage temperature range	T _J , T _{STG}	-55 to +150							°C

NOTES:

- (1) Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (3) Thermal resistance from junction to ambient and junction to lead
P.C.B. mounted on 0.27 x 0.27" (7.0 x 7.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES S2A THRU S2M

FIG. 1 - FORWARD CURRENT DERATING CURVE

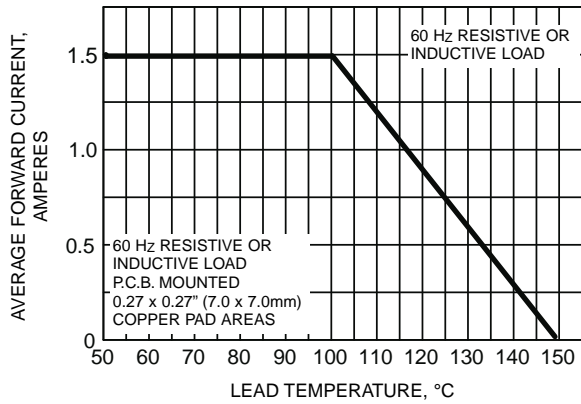


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

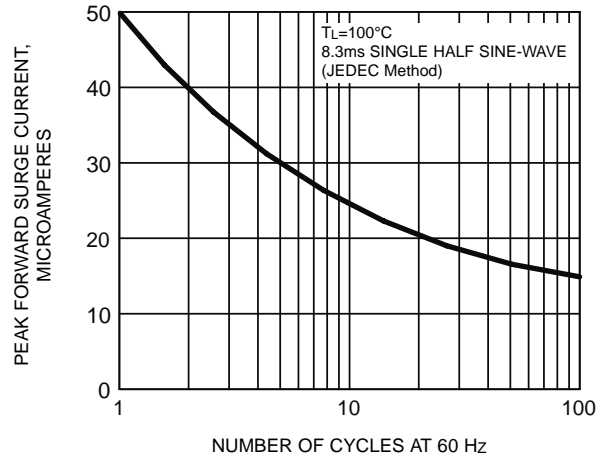


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

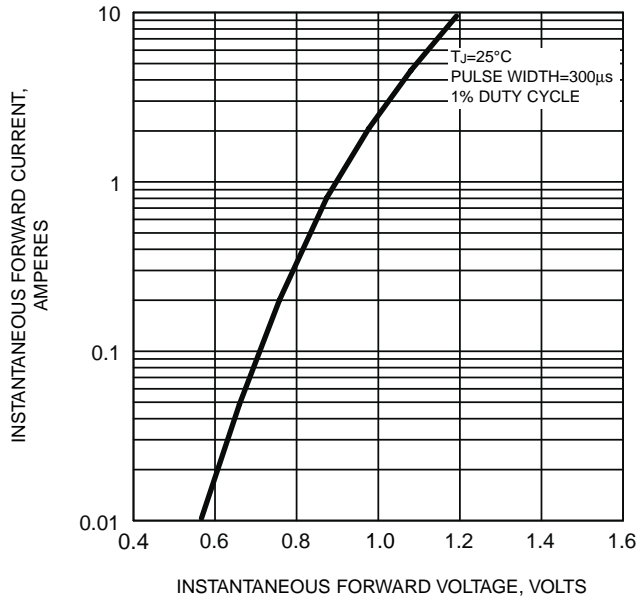


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

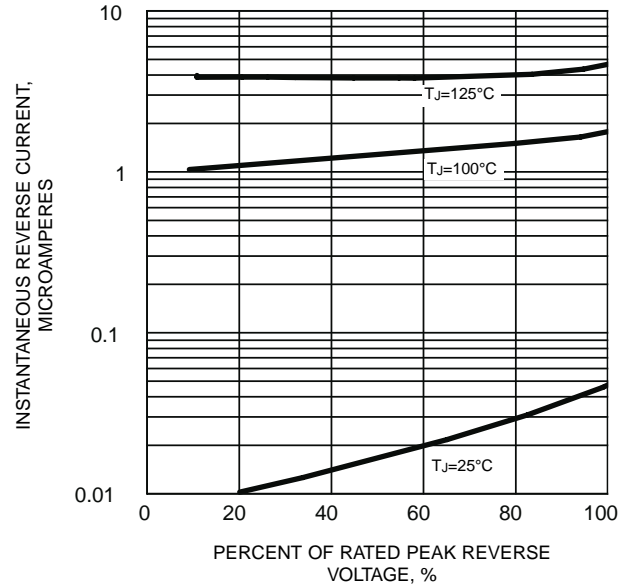


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

