

S2A~S2M

SURFACE MOUNT RECTIFIER

VOLTAGE 50 to 1000 Volt **CURRENT** 2 Ampere

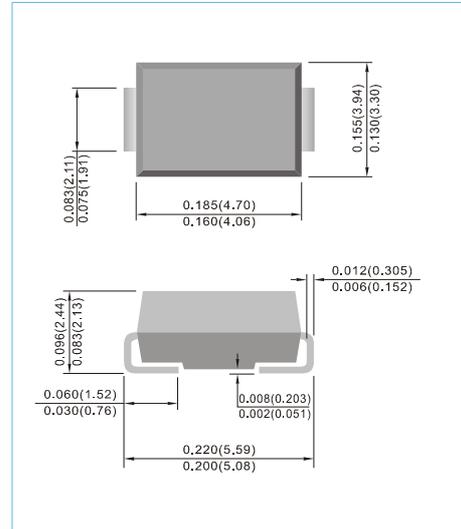
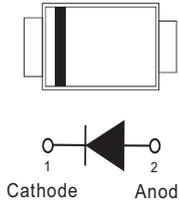
SMB / DO-214AA Unit : inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications in order to optimize board space
- Easy pick and place
- Glass passivated junction
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case: JEDEC DO-214AA molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.003 ounces, 0.092 grams



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 current by 20%.

PARAMETER	SYMBOL	S2A	S2B	S2D	S2G	S2J	S2K	S2M	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current	$I_{F(AV)}$	2							A
Peak Forward Surge Current : 8.3ms Single Half Sine-Wave Superimposed On Rated Load	I_{FSM}	60							A
Peak Forward Surge Current : Square Wave, t=1ms, Non-Repetitive 1 Cycle Peak Value	I_{FSM}	130							A
Maximum Forward Voltage at 2A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	I_R	1 125							μA
Maximum Junction Capacitance (Note 1)	C_J	30							pF
Typical Junction Resistance (Note 2)	$R_{\theta JL}$	16							$^{\circ}C / W$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^{\circ}C$

NOTES :

1. Measured at 1MHZ and applied $V_R=4$ volts.
2.8 x 8mm² pads.

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RATING AND CHARACTERISTIC CURVES

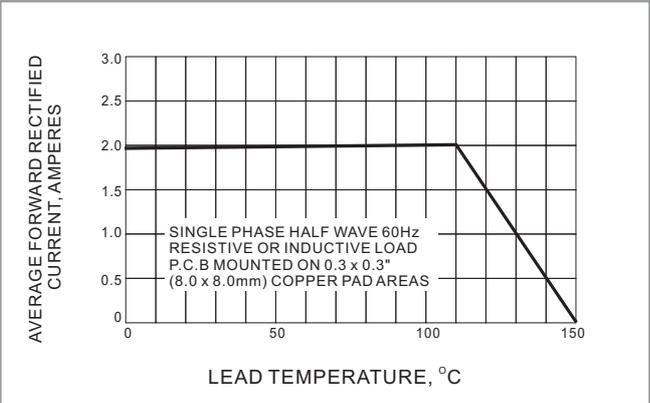


Fig.1 FORWARD CURRENT DERATING CURVE

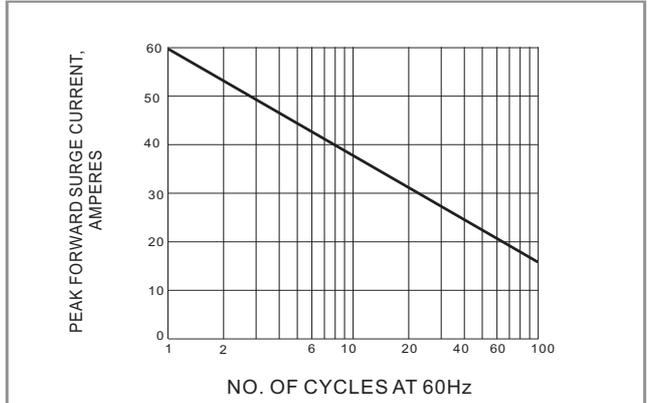


Fig.2 MAXIMUM NON REPETITIVE PEAK SURGE CURRENT

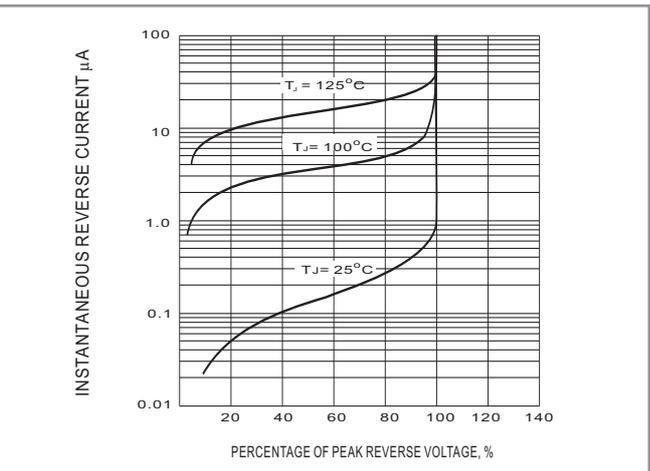


Fig.3 TYPICAL REVERSE CHARACTERISTIC

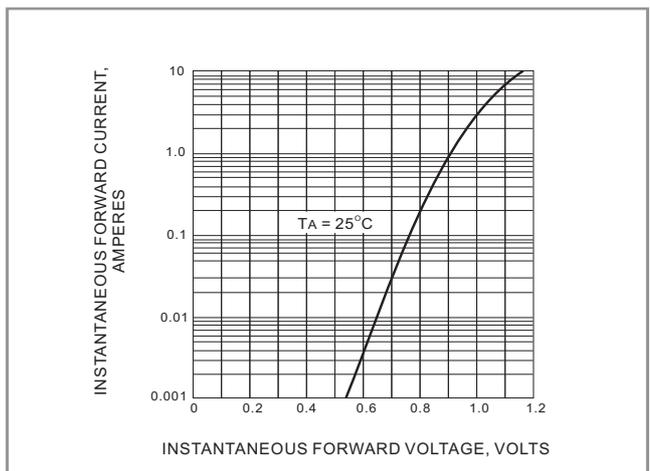


FIG.2 TYPICAL FORWARD CHARACTERISTICS

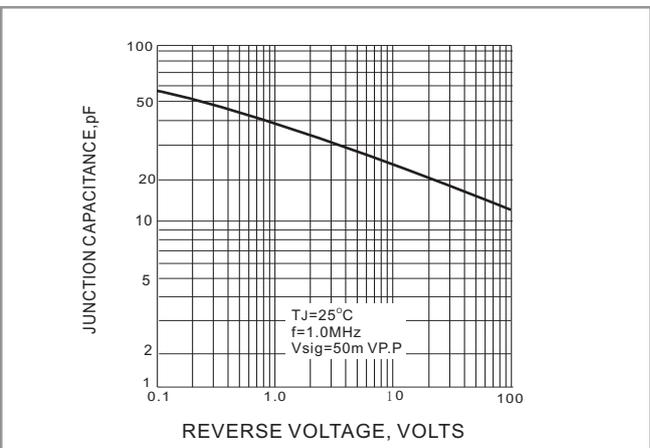


Fig.5 TYPICAL JUNCTION CAPACITANCE

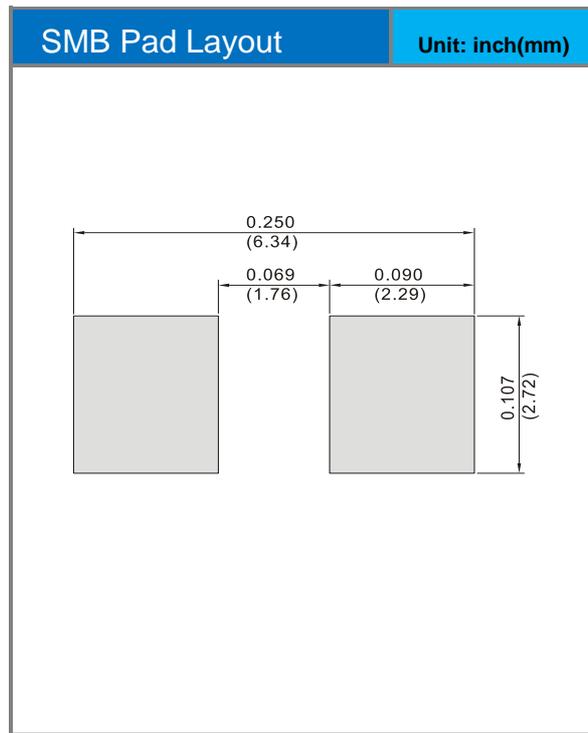
S2A~S2M

Product and Packing Information

Part No.	Package Type	Packing Type	Marking
S2A	SMB	0.8K pcs / 7" reel	S2A
S2A	SMB	3K pcs / 13" reel	S2A
S2B	SMB	0.8K pcs / 7" reel	S2B
S2B	SMB	3K pcs / 13" reel	S2B
S2D	SMB	0.8K pcs / 7" reel	S2D
S2D	SMB	3K pcs / 13" reel	S2D
S2G	SMB	0.8K pcs / 7" reel	S2G
S2G	SMB	3K pcs / 13" reel	S2G
S2J	SMB	0.8K pcs / 7" reel	S2J
S2J	SMB	3K pcs / 13" reel	S2J
S2K	SMB	0.8K pcs / 7" reel	S2K
S2K	SMB	3K pcs / 13" reel	S2K
S2M	SMB	0.8K pcs / 7" reel	S2M
S2M	SMB	3K pcs / 13" reel	S2M

S2A~S2M

Mounting Pad Layout



S2A~S2M

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