S2A-M

2.0 A Surface Mount Glass Passivated Rectifier
Rectifier Reverse Voltage 50 to 1000V

Features

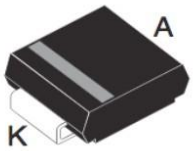
- Ideal for surface mount application
- Surge overload rating to 50A peak
- Plastic material has UL recognition flammability classification 94V-0
- Buit-in strain relief
- RoHS compliant package

Mechanical Data

- Case: Molded plastic
- Terminals: Solder plated solderable per MIL-STD-202F, Method 208
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.093 grams (approx)

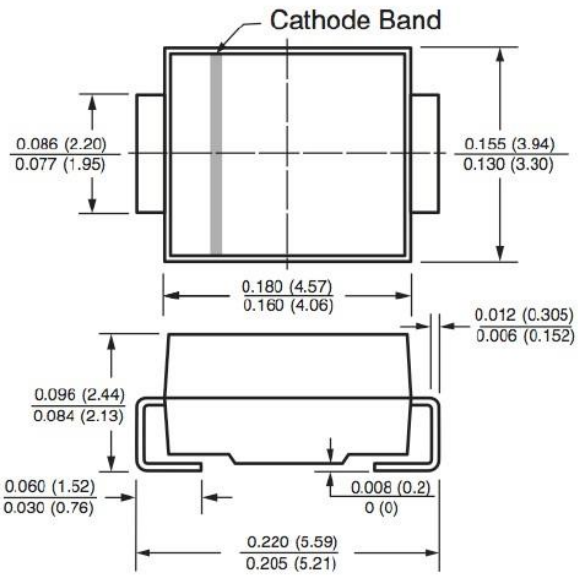
Packing & Order Information

5,000/Reel



RoHS
COMPLIANT

DO-214AA (SMB)



Graphic symbol

MAXIMUM RATINGS AND THERMAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz. For Capacitive load derate current by 20%.

		S2A	S2B	S2D	S2G	S2J	S2K	S2M	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RWS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	100	V
Maximum average forward rectified current at T_L=80°C	$I_{F(AV)}$	2.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							A
Typical thermal resistance per element (1)	$R_{\theta JA}$	16							°C/W

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		S2A	S2B	S2D	S2G	S2J	S2K	S2M	UNITS
Typical junction capacitance per element (2)	C_J	30							pF
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +150							°C

ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz. For Capacitive load derate by 20%.									
		S2A	S2B	S2D	S2G	S2J	S2K	S2M	UNITS
Maximum instantaneous forward voltage drop per leg at 2.0A	V_F	1.15							V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	I_R	5.0 125							μA

Notes:

(1)Thermal resistance from Junction to Ambemt on P.C.board mounting.

(2)Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

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■Ratings and Characteristic Curves (TA=25°C Unless otherwise noted)

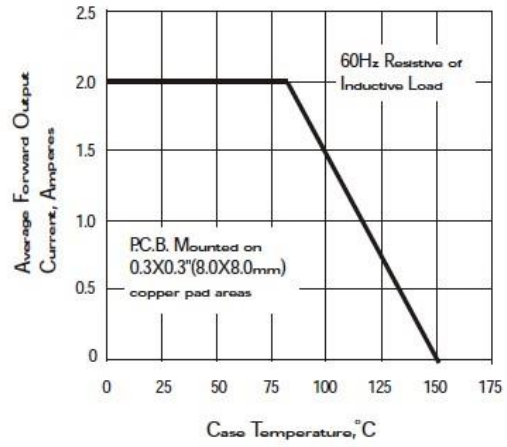

FIG. 1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

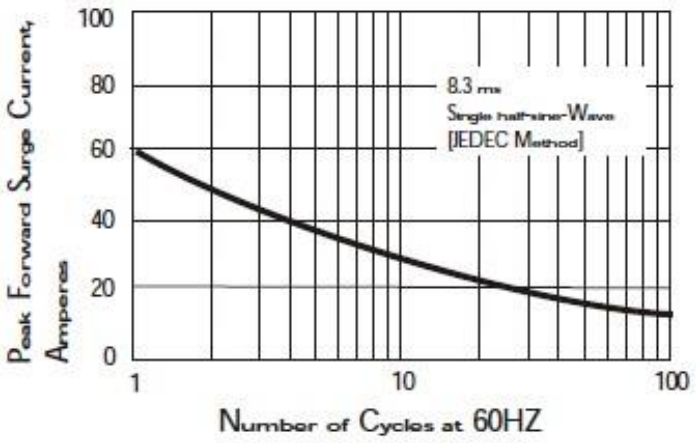

FIG. 2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

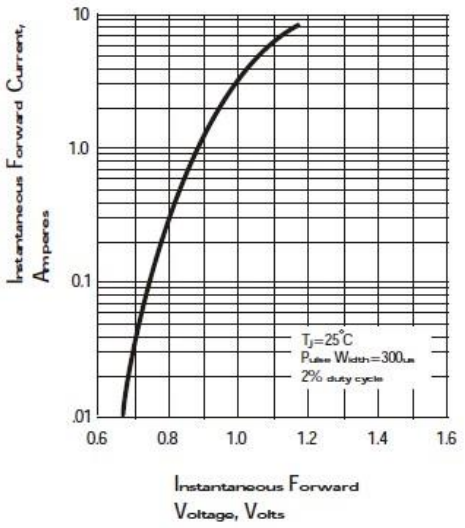

FIG. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

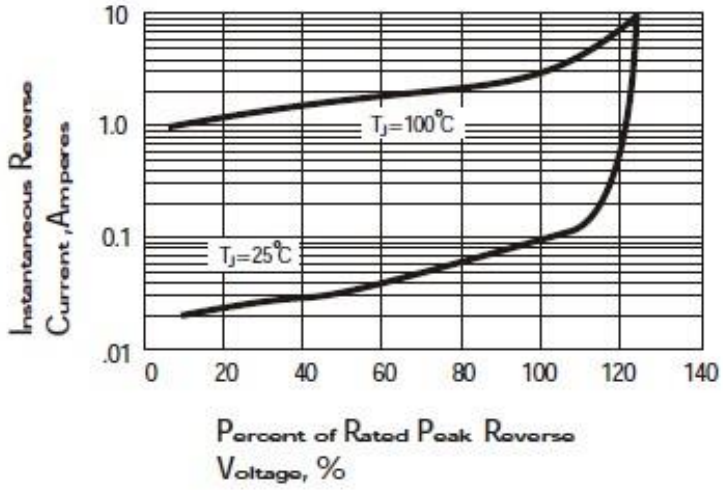

FIG. 4 TYPICAL REVERSE CHARACTERISTICS

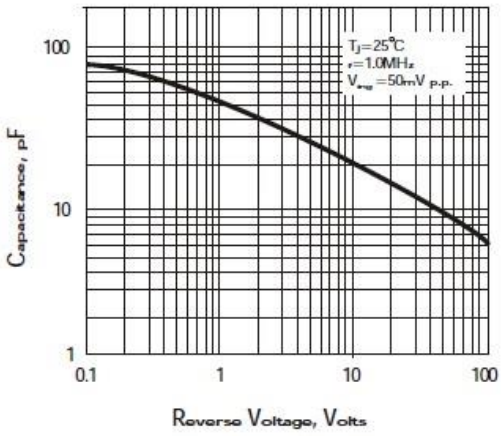

FIG. 5 TYPICAL JUNCTION CHARACTERISTICS

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