

Surface Mount Fast Recovery Rectifiers

Parameter	Value	Unit
V_{RRM}	50~1000	V
$I_{F(AV)}$	2.0	A



DO-214AA/SMB

Features

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Fast reverse recovery time

Applications

- For use in fast-switching rectification in power supplies, inverters, converters, and as free-wheeling diodes in consumer and telecommunications equipment.

Absolute Maximum Ratings and Characteristics (at $T_J = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	RS2AB	RS2BB	RS2DB	RS2GB	RS2JB	RS2KB	RS2MB	Units
Maximum Repetitive 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 Rectified Current	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	60							A
Maximum Forward Voltage at 2A	V_F	1.3							V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 125^\circ\text{C}$	I_R	5 100							μA
Typical Junction Capacitance at $V_R = 4\text{V}$, $f = 1\text{MHz}$	C_j	28							pF
Maximum Reverse Recovery Time (1)	t_{rr}	150				250	500		ns
Typical Thermal Resistance (2)	$R_{\theta JA}$ $R_{\theta JC}$	60 20							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							$^\circ\text{C}$

Notes:

- (1) Measured with $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25\text{A}$.
- (2) P.C.B. mounted with 2.0" X 2.0" (5 X 5cm) copper pad areas.

Typical characteristics

Fig.1 Forward Current Derating Curve

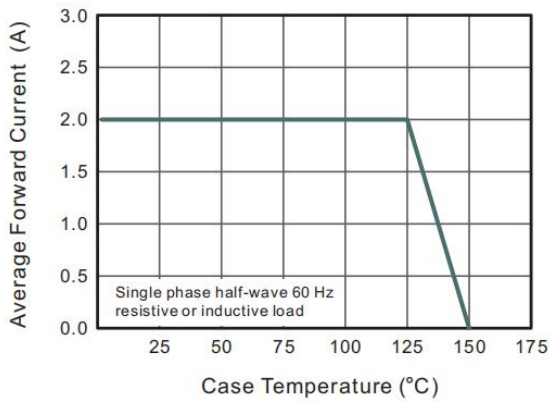


Fig.2 Typical Reverse Characteristics

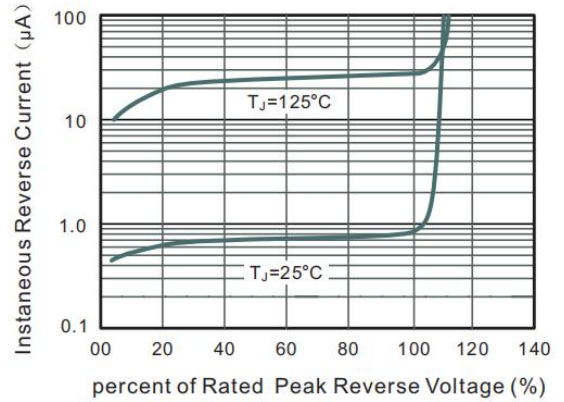


Fig.3 Typical Instantaneous Forward Characteristics

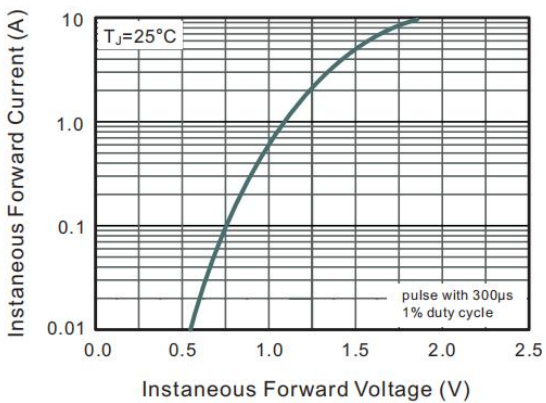


Fig.4 Typical Junction Capacitance

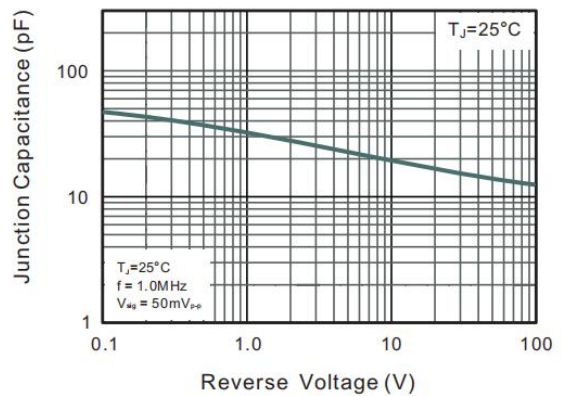
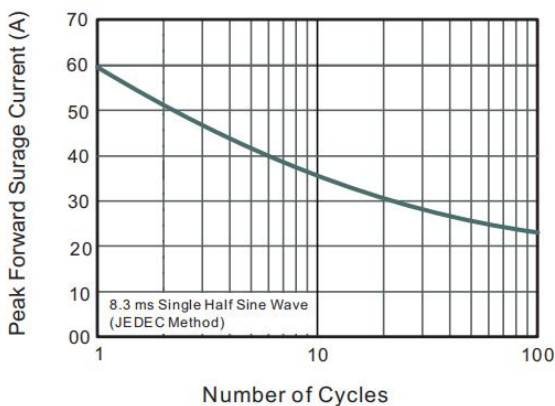
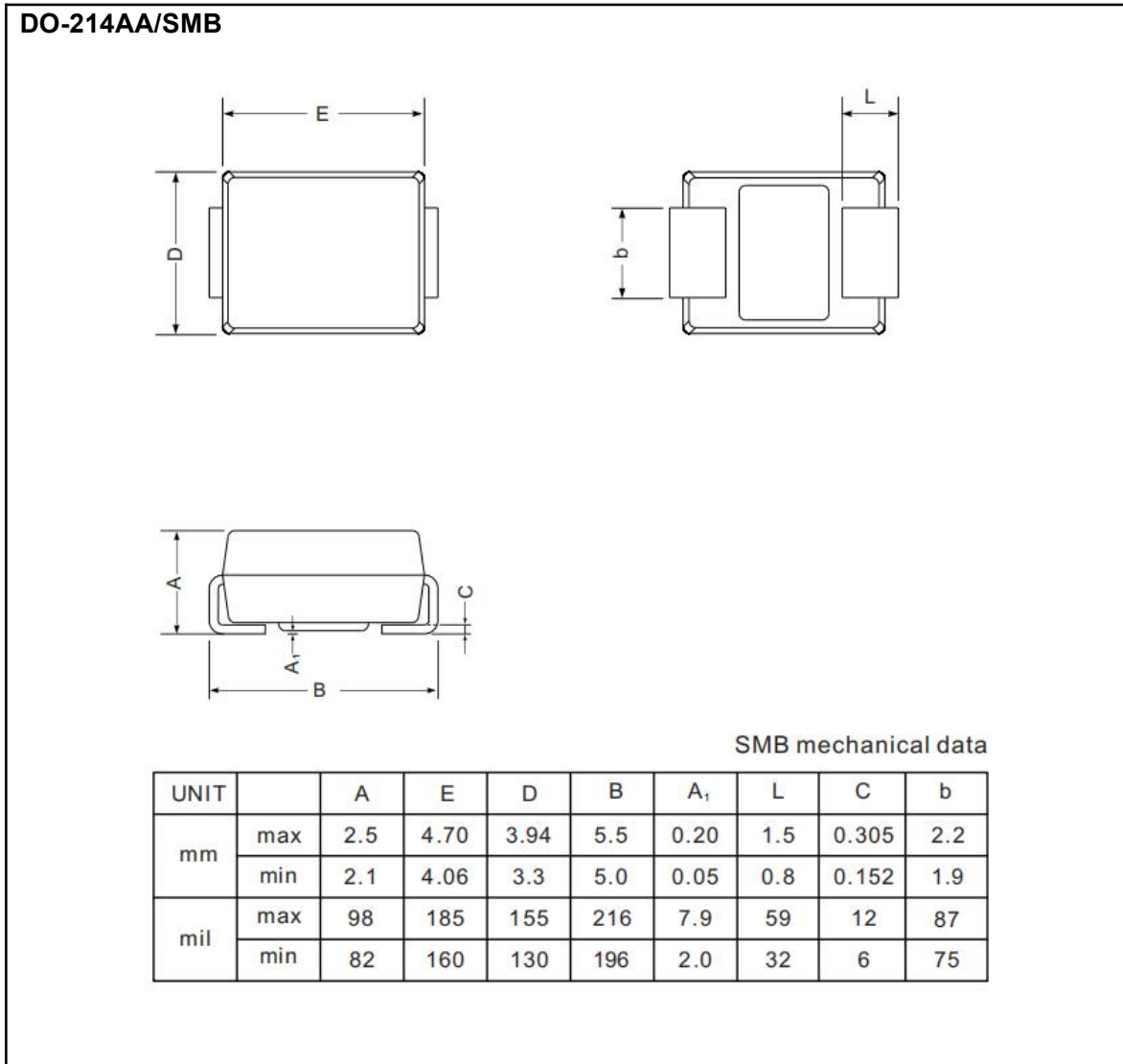


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

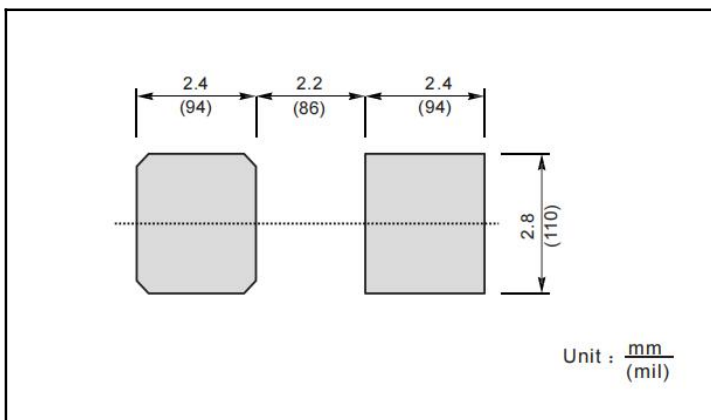


Package outlines

Plastic surface mounted package; 2 leads



The recommended mounting pad size



Marking

Type number	Marking code
RS2AB	RS2A
RS2BB	RS2B
RS2DB	RS2D
RS2GB	RS2G
RS2JB	RS2J
RS2KB	RS2K
RS2MB	RS2M

***Important Usage Information and Disclaimer**

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