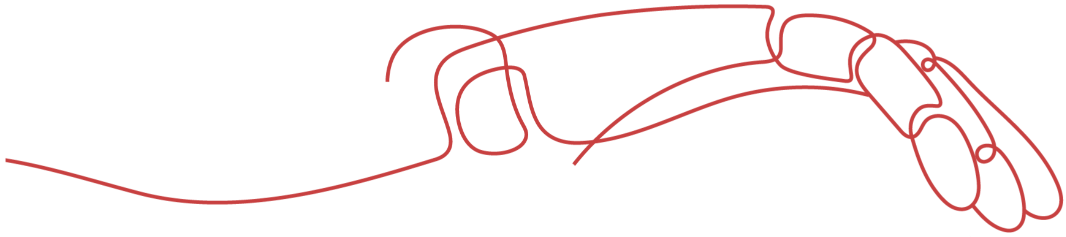
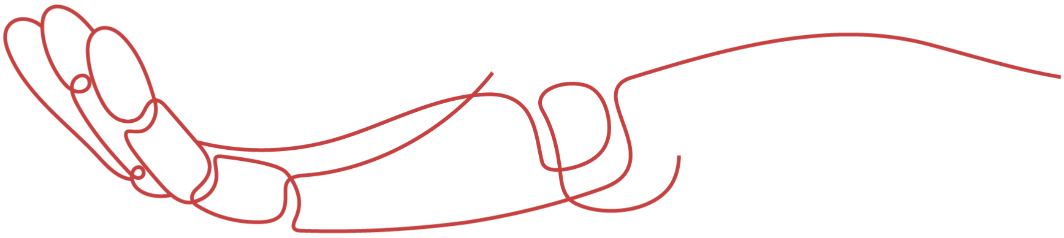
JG® Techology



PRODUCT DATA SHEET



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Datasheet **Resources** **Samples**

Please note: Please check the JINGAO Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.jg-semi.cn. Please email any questions regarding the system integration to JINGAO_questions@jgsemi.com.

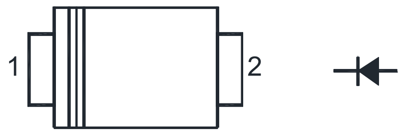
RS3A THRU RS3M

Surface Mount Fast Recovery Rectifiers

Reverse Voltage - 50 to 1000 V
Forward Current - 3 A

Features

- Plastic package has UL flammability classification 94V-0
- For surface mounted applications
- Glass passivated chip junction



SMC(DO-214AB)

Mechanical Data

- Case: SMC (DO-214AB) molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, method
- Polarity: color band denotes cathode end

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

Parameter		Symbols	RS3A	RS3B	RS3D	RS3G	RS3J	RS3K	RS3M	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 Rectified Current		$I_{F(AV)}$	3							A
Peak Forward Surge Current, 8.3 ms Single Half Sine Wave Superimposed on Rated Load		I_{FSM}	100							A
Maximum Forward Voltage at 3 A		V_F	1.3							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_j = 25℃ T_j = 125℃	I_R	10 200							μA
Maximum Reverse Recovery Time [1]		t_{rr}	150				250	500		ns
Typical Junction Capacitance [2]		C_J	40							pF
Typical Thermal Resistance [3]		$R_{\theta JA}$ $R_{\theta JC}$	55 22							℃/W
Operating Junction and Storage Temperature Range		T_j , T_{stg}	- 55 to + 150							℃

[1] Reverse recovery time test conditions: I_F = 0.5 A, I_R = 1 A, Irr = 0.25 A.

[2] Measured at 1 MHz and applied reverse voltage of 4 V.

[3] Thermal resistance from junction to ambient P.C.B mounted on 2.0" X 2.0" (5 X 5 cm) copper pad ares.

Electrical Characteristics Curves

Fig.1 Maximum Average Forward Current Rating

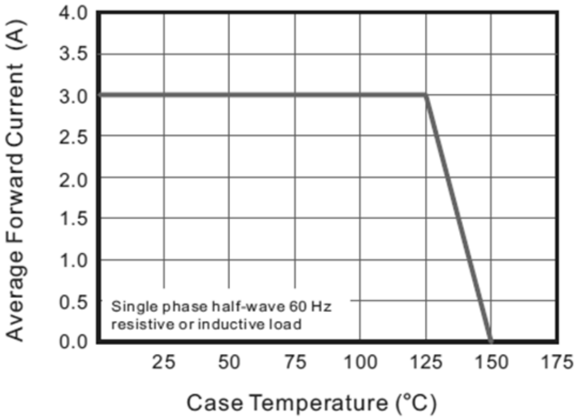


Fig.2 Typical Reverse Characteristics

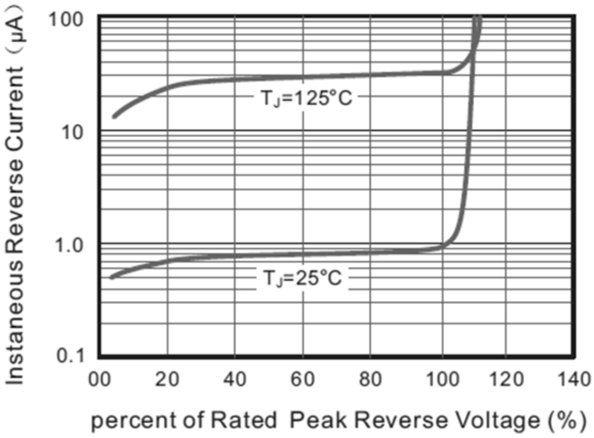


Fig.3 Typical Instaneous Forward Characteristics

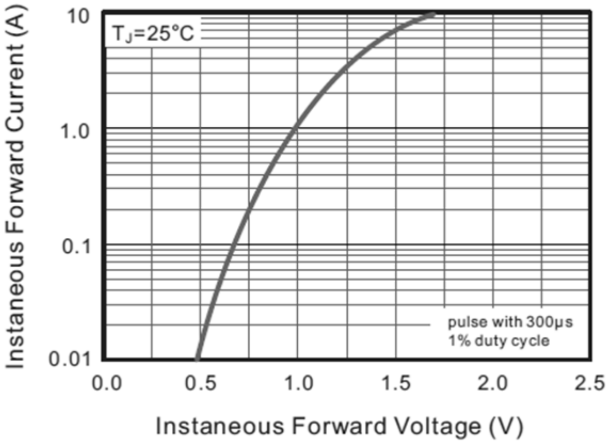


Fig.4 Typical Junction Capacitance

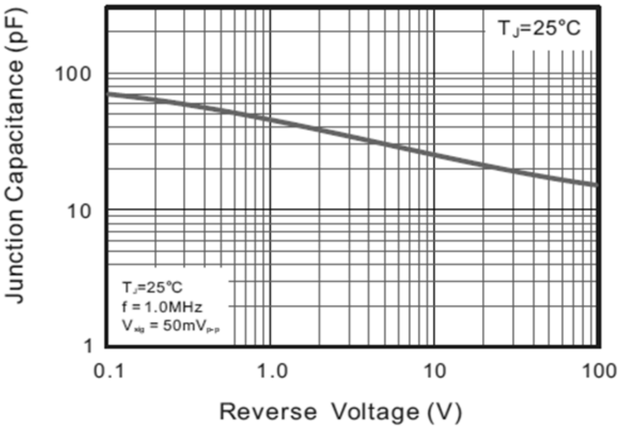
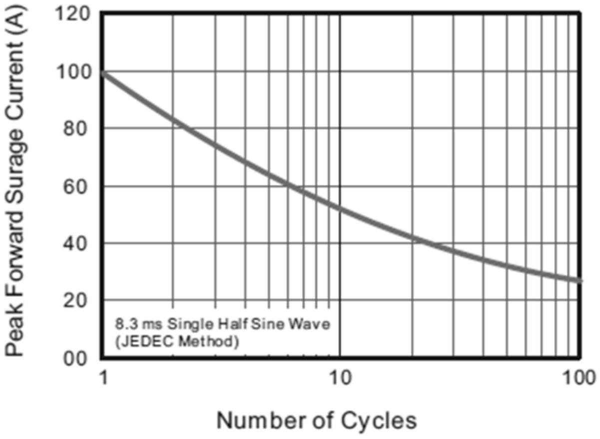
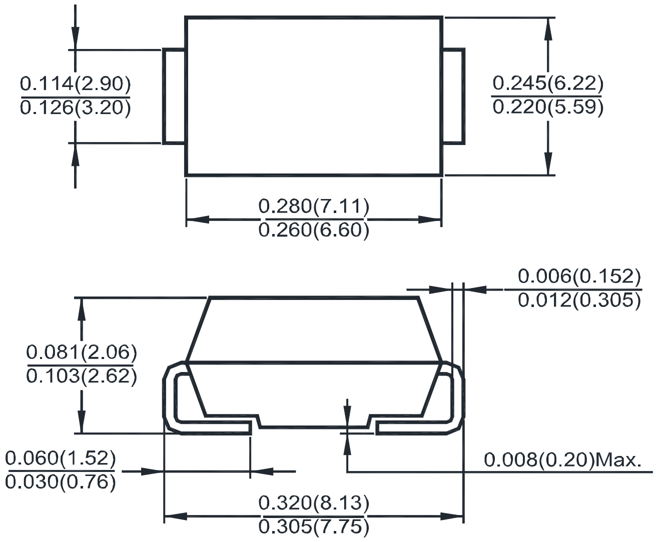


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

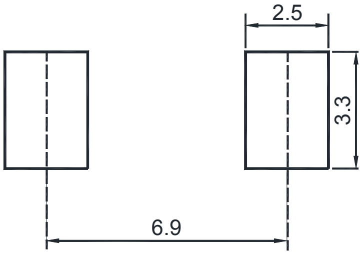


Package Outline Dimensions in inches (millimeters)

SMC(DO-214AB)



Recommended Soldering Footprint



Marking information

" RS3* " = Part No.

Type	Marking	Type	Marking	Type	Marking	Type	Marking
RS3A	RS3A	RS3B	RS3B	RS3D	RS3D	RS3G	RS3G
RS3J	RS3J	RS3K	RS3K	RS3M	RS3M		

" III " = Cathode line

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