

RS3AB~RS3MB

Rev.A Dec.-2017



DATA SHEET

50V~1000V

3.0A

SMB

Surface Mount Fast Recovery Rectifiers, Reverse Voltage

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating							Unit
		RS3AB	RS3BB	RS3DB	RS3GB	RS3JB	RS3KB	RS3MB	
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}	3.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I _{FSM}	90							A
Typical Junction Capacitance at VR=4V f=1MHz	C _j	40							pF
Typical Thermal Resistance ¹	R _{θJA}	48							/W
	R _{θJC}	16							
Operating and Storage Temperature Range	T _j , T _{stg}	-55~+150							

Note:

1 P.C.B. mounted with 2.0 X 2.0" (5X 5 cm) copper pad areas.

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Rating							Unit
			RS3AB	RS3BB	RS3DB	RS3GB	RS3JB	RS3KB	RS3MB	
Maximum Instantaneous Forward Voltage	V_F	$I_F=3.0A$	1.3							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_a=25$	5.0							μA
		$T_a=125$	100							μA
Maximum Reverse Recovery Time	t_{rr}	$I_F=0.5A$ $I_R=1.0A$ $I_{rr}=0.25A$	150				250	500		ns

/ Electrical Characteristic Curve

Fig.1 Maximum Average Forward Current Rating

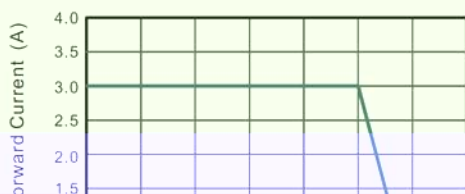
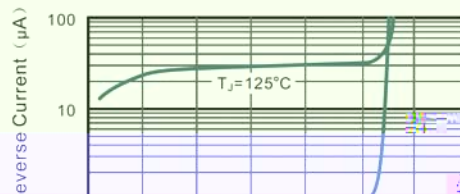


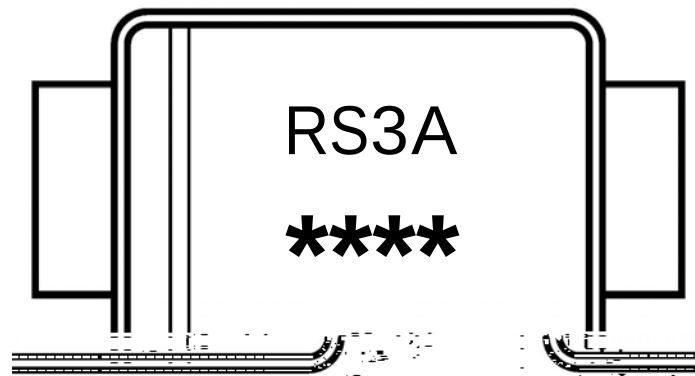
Fig.2 Typical Reverse Characteristics



Marking

Type number	Marking code
RS3A	RS3AB
RS3B	RS3BB
RS3C	RS3CB
RS3D	RS3DB
RS3E	RS3EB
RS3F	RS3FB
RS3G	RS3GB
RS3H	RS3HB
RS3I	RS3IB
RS3J	RS3JB
RS3K	RS3KB
RS3L	RS3LB
RS3M	RS3MB
RS3N	RS3NB
RS3O	RS3OB
RS3P	RS3PB
RS3Q	RS3QB
RS3R	RS3RB
RS3S	RS3SB
RS3T	RS3TB
RS3U	RS3UB
RS3V	RS3VB
RS3W	RS3WB
RS3X	RS3XB
RS3Y	RS3YB
RS3Z	RS3ZB
RS3AA	RS3AB
RS3AB	RS3AB
RS3AC	RS3AB
RS3AD	RS3AB
RS3AE	RS3AB
RS3AF	RS3AB
RS3AG	RS3AB
RS3AH	RS3AB
RS3AI	RS3AB
RS3AJ	RS3AB
RS3AK	RS3AB
RS3AL	RS3AB
RS3AM	RS3AB
RS3AN	RS3AB
RS3AO	RS3AB
RS3AP	RS3AB
RS3AQ	RS3AB
RS3AR	RS3AB
RS3AS	RS3AB
RS3AT	RS3AB
RS3AU	RS3AB
RS3AV	RS3AB
RS3AW	RS3AB
RS3AX	RS3AB
RS3AY	RS3AB
RS3AZ	RS3AB
RS3BA	RS3BB
RS3BB	RS3BB
RS3BC	RS3BB
RS3BD	RS3BB
RS3BE	RS3BB
RS3BF	RS3BB
RS3BG	RS3BB
RS3BH	RS3BB
RS3BI	RS3BB
RS3BJ	RS3BB
RS3BK	RS3BB
RS3BL	RS3BB
RS3BM	RS3BB
RS3BN	RS3BB
RS3BO	RS3BB
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RS3CK	RS3CB
RS3CL	RS3CB
RS3CM	RS3CB
RS3CN	RS3CB
RS3CO	RS3CB
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RS3CQ	RS3CB
RS3CR	RS3CB
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RS3CU	RS3CB
RS3CV	RS3CB
RS3CW	RS3CB
RS3CX	RS3CB
RS3CY	RS3CB
RS3CZ	RS3CB
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RS3FO	RS3FB
RS3FP	RS3FB
RS3FQ	RS3FB
RS3FR	RS3FB
RS3FS	RS3FB
RS3FT	RS3FB
RS3FU	RS3FB
RS3FV	RS3FB
RS3FW	RS3FB
RS3FX	RS3FB
RS3FY	RS3FB
RS3FZ	RS3FB
RS3GA	RS3GB
RS3GB	RS3GB

/ Marking Instructions



RS3A

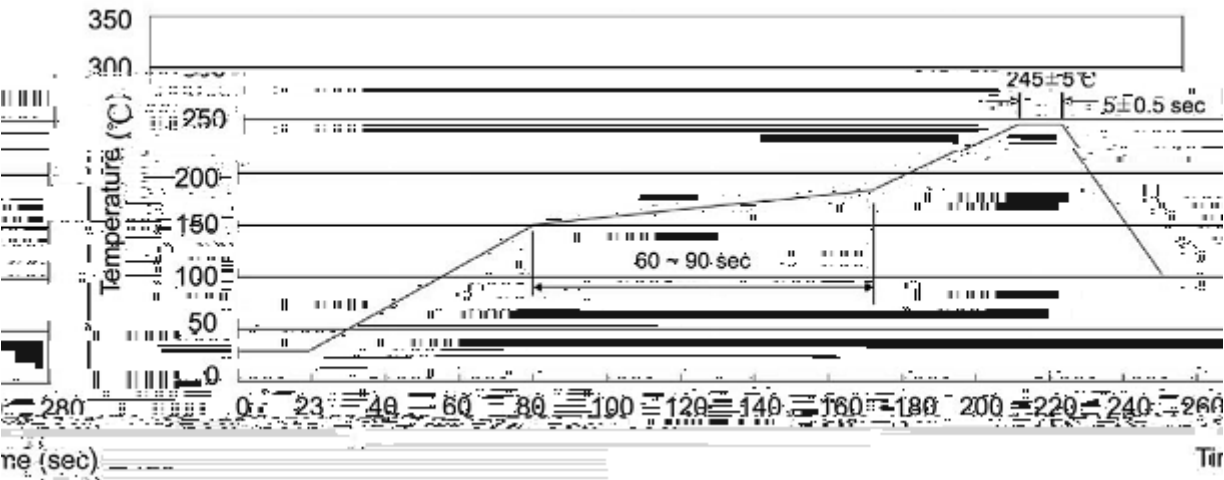
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Note:

RS3A Product Type Code

**** Lot No. Code The 1st means:YM Code The last 3 means:little Lot No
Code



Note:

- 1

25 150

60 90sec;

1.Preheating:25~150 , Time:60~90sec.
- 2

245±5

5±0.5sec;

2.Peak Temp.:245±5 , Duration:5±0.5sec.
- 3

2 10 /sec.

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SMB	3000	5	15000	5	75000	7 ×11	185X180X105	390X385X205

/ Notices