

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

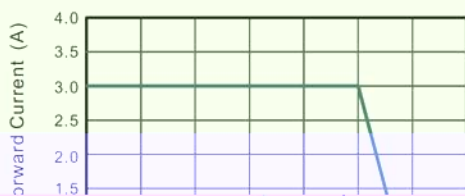
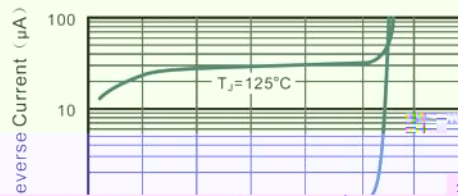


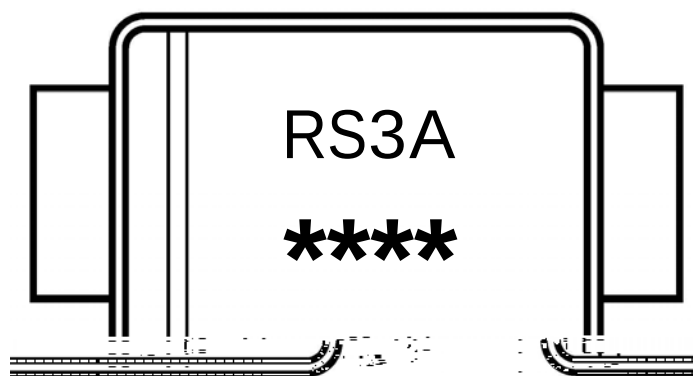
Fig.2 Typical Reverse Characteristics



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
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	RS3AB
RS3BB	RS3AB
RS3BC	RS3AB
RS3BD	RS3AB
RS3BE	RS3AB
RS3BF	RS3AB
RS3BG	RS3AB
RS3BH	RS3AB
RS3BI	RS3AB
RS3BJ	RS3AB
RS3BK	RS3AB
RS3BL	RS3AB
RS3BM	RS3AB
RS3BN	RS3AB
RS3BO	RS3AB
RS3BP	RS3AB
RS3BQ	RS3AB
RS3BR	RS3AB
RS3BS	RS3AB
RS3BT	RS3AB
RS3BU	RS3AB
RS3BV	RS3AB
RS3BW	RS3AB
RS3BX	RS3AB
RS3BY	RS3AB
RS3BZ	RS3AB
RS3CA	RS3AB
RS3CB	RS3AB
RS3CC	RS3AB
RS3CD	RS3AB
RS3CE	RS3AB
RS3CF	RS3AB
RS3CG	RS3AB
RS3CH	RS3AB
RS3CI	RS3AB
RS3CJ	RS3AB
RS3CK	RS3AB
RS3CL	RS3AB
RS3CM	RS3AB
RS3CN	RS3AB
RS3CO	RS3AB
RS3CP	RS3AB
RS3CQ	RS3AB
RS3CR	RS3AB
RS3CS	RS3AB
RS3CT	RS3AB
RS3CU	RS3AB
RS3CV	RS3AB
RS3CW	RS3AB
RS3CX	RS3AB
RS3CY	RS3AB
RS3CZ	RS3AB
RS3DA	RS3AB
RS3DB	RS3AB
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RS3FF	RS3AB
RS3FG	RS3AB
RS3FH	RS3AB
RS3FI	RS3AB
RS3FJ	RS3AB
RS3FK	RS3AB
RS3FL	RS3AB
RS3FM	RS3AB
RS3FN	RS3AB
RS3FO	RS3AB
RS3FP	RS3AB
RS3FQ	RS3AB
RS3FR	RS3AB
RS3FS	RS3AB
RS3FT	RS3AB
RS3FU	RS3AB
RS3FV	RS3AB
RS3FW	RS3AB
RS3FX	RS3AB
RS3FY	RS3AB
RS3FZ	RS3AB
RS3GA	RS3AB
RS3GB	RS3AB
RS3GC	RS3AB

/ Marking Instructions



RS3A

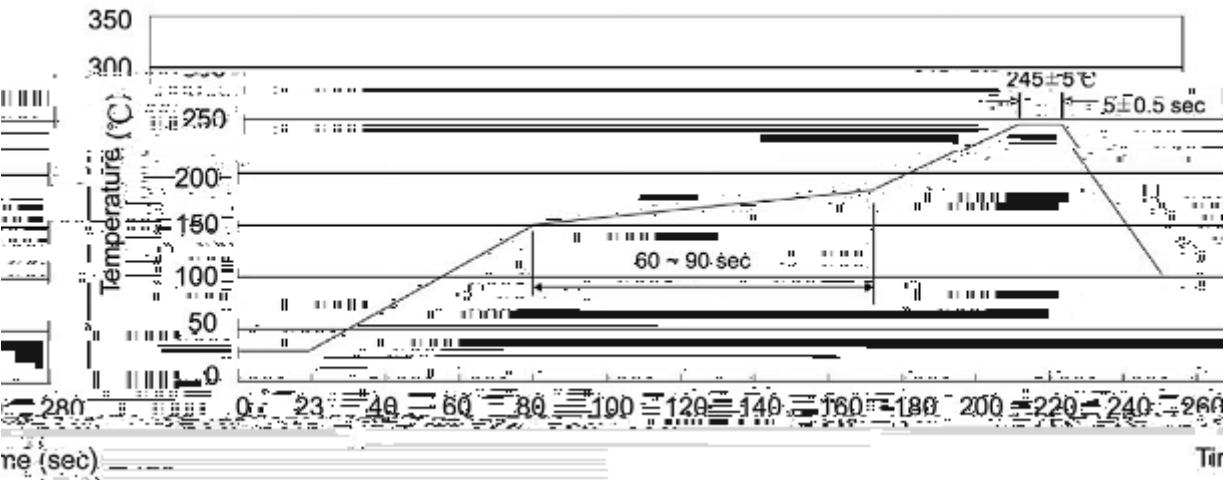
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Note:

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