



# RS5ABF~RS5MBF

Rev.A Jan.-2024



DATA SHEET

## / Absolute Maximum Ratings(Ta=25 )

Parameter	Symbol	Rating							Unit
		RS5ABF	RS5BBF	RS5DBF	RS5GBF	RS5JBF	RS5KBF	RS5MBF	
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ Fig.1	I <sub>F AV</sub>	5							A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	150							A
Peak Forward Surge Current,1.0ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	300							A
I <sup>2</sup> t Rating for fusing (3ms t 8.3ms)	I <sup>2</sup> t	93.3							A <sup>2</sup> s
Typical Junction Capacitance <sup>(1)</sup>	C <sub>j</sub>	38					70		pF
Typical Thermal Resistance <sup>(2)</sup>	R <sub>JA</sub> R <sub>JC</sub> R <sub>JL</sub>	42 10 15							/W
Operating and Storage Temperature Range	T <sub>j</sub> ,T <sub>stg</sub>	-55~+150							

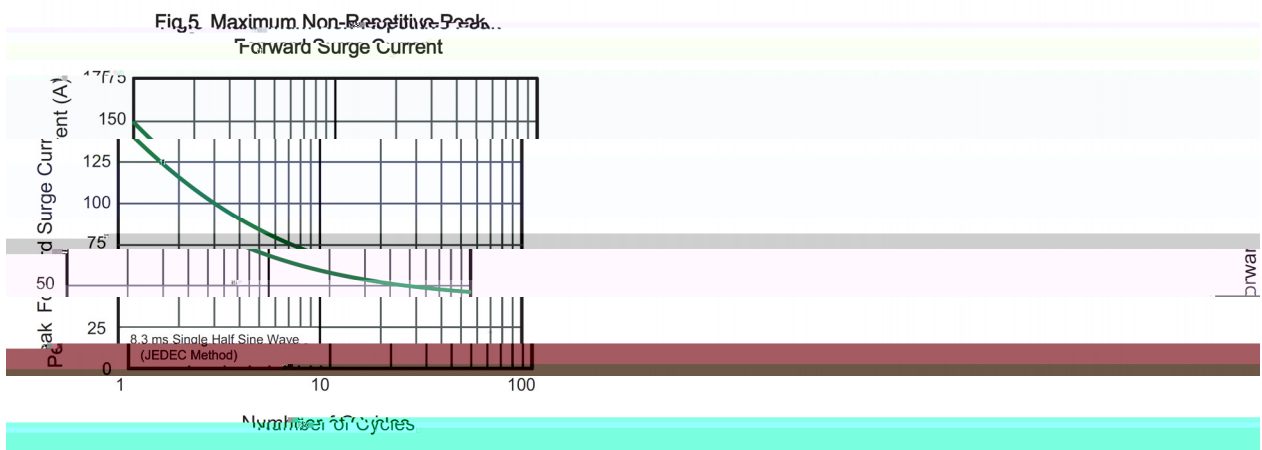
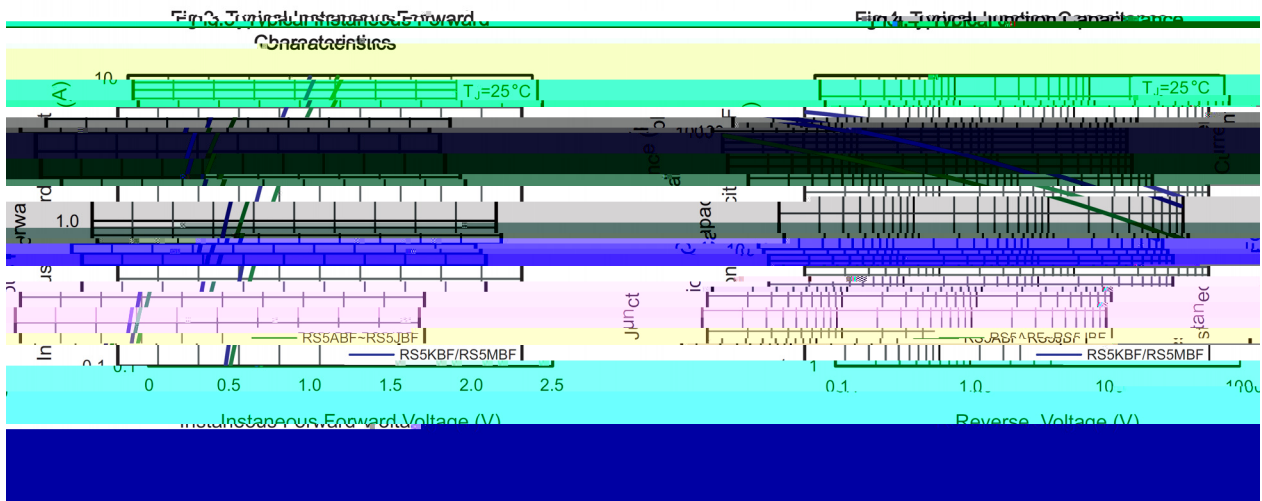
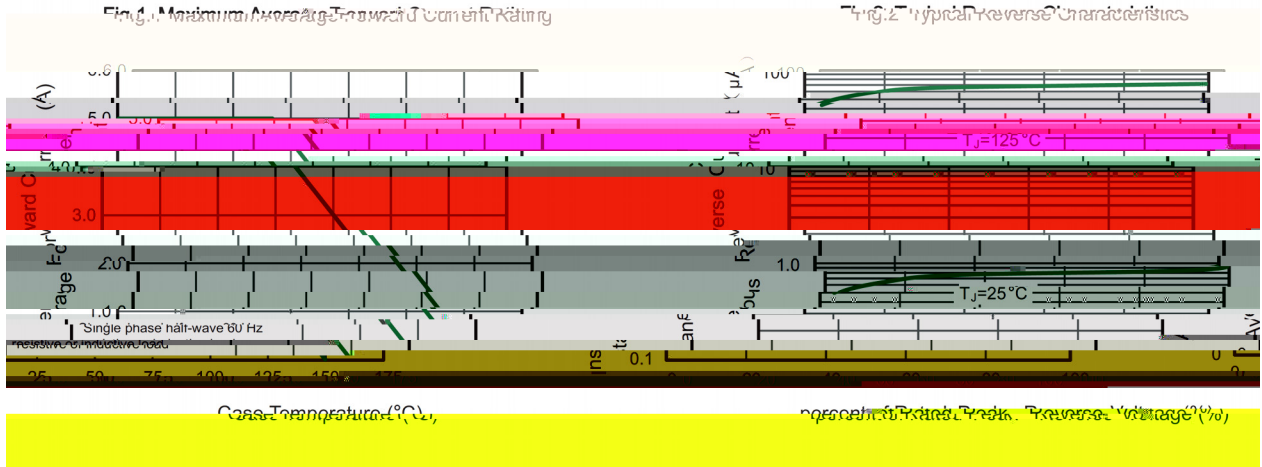
Note:

- 1 Measured at 1 MHz and applied reverse voltage of 4V D.C
- 2 P.C.B. mounted with 1.5" X 1.5" (3.81 X 3.81 cm) copper pad areas.

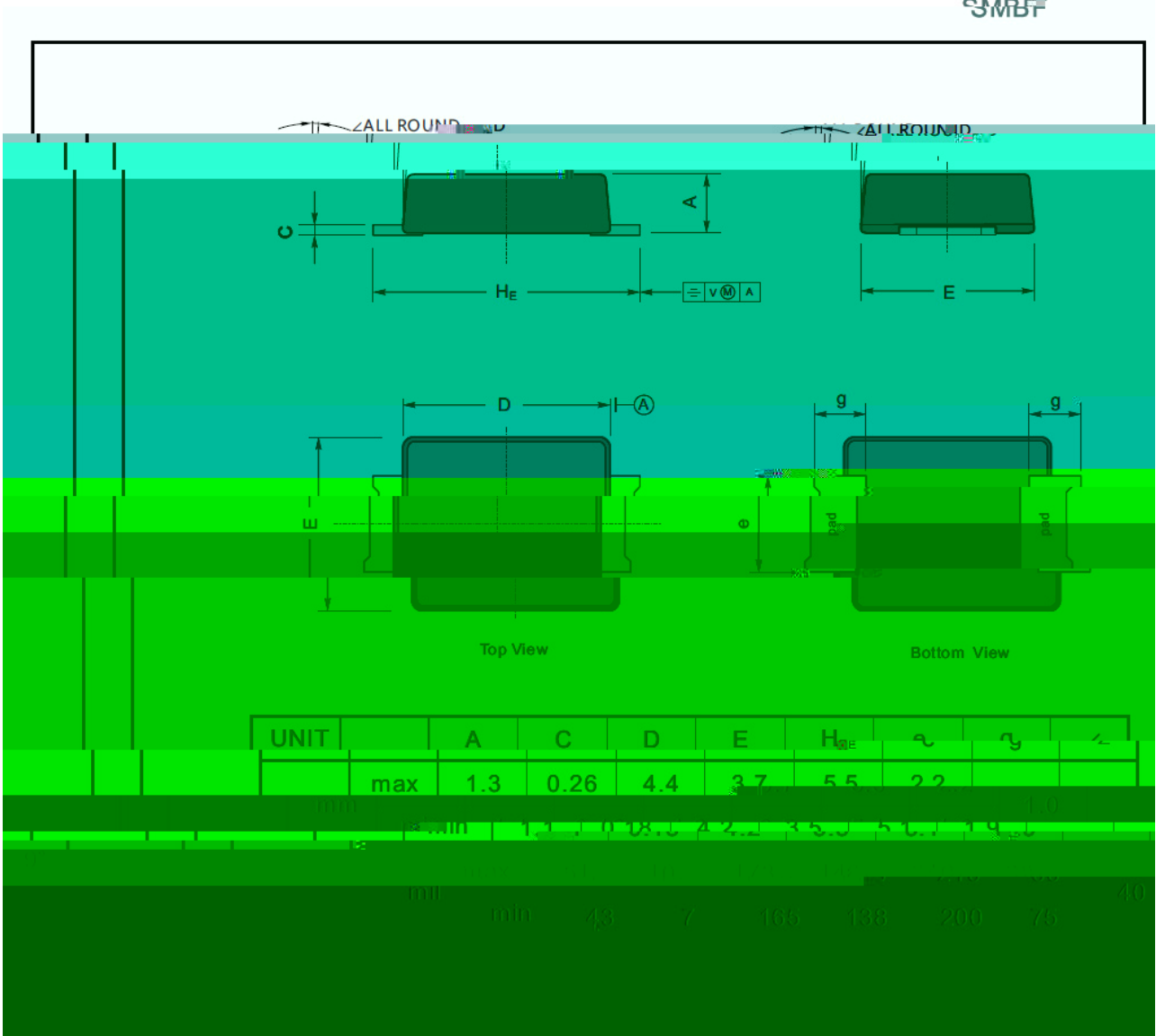
## / Electrical Characteristics(Ta=25 )

Parameter	Symbol	Test Conditions	Rating						Unit
			RS5ABF	RS5BBF	RS5DBF	RS5GBF	RS5JBF	RS5KBF	
Maximum Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =5A	1.3						V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	T <sub>a</sub> =25	10						μA
		T <sub>a</sub> =125	150						μA
Maximum Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =0.5A I <sub>R</sub> =1A I <sub>rr</sub> =0.25A	150			250	500		ns

/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



R5AB

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Note:

R5AB            Product Type Code

\*\*\*\*            Lot No. Code, code change with Lot No

**Marking**

Type number	Marking code
RS5ABF	R5AB
RS5BBF	R5BB
RS5DBF	R5DB
RS5GBF	R5GB
RS5JBF	R5JB
RS5KBF	R5KB
RS5MBF	R5MB

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## ( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- 1        150 180            60 90sec;        1.Preheating:150~180 , 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	Units					Dimension (unit mm <sup>3</sup> )		
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
SMBF	5,000	2	10,000	7	70,000	13 ×12	336X336X40	380X335X366

## / Notices