

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 _{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 @ Fig.1	I _{F AV}	5							A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	150							A
Peak Forward Surge Current,1.0ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	300							A
I ² t Rating for fusing (3ms t 8.3ms)	I ² t	93.3							A ² s
Typical Junction Capacitance ⁽¹⁾	C _j	38					70		pF
Typical Thermal Resistance ⁽²⁾	R _{JA} R _{JC} R _{JL}	42 10 15							/W
Operating and Storage Temperature Range	T _j ,T _{stg}	-55~+150							

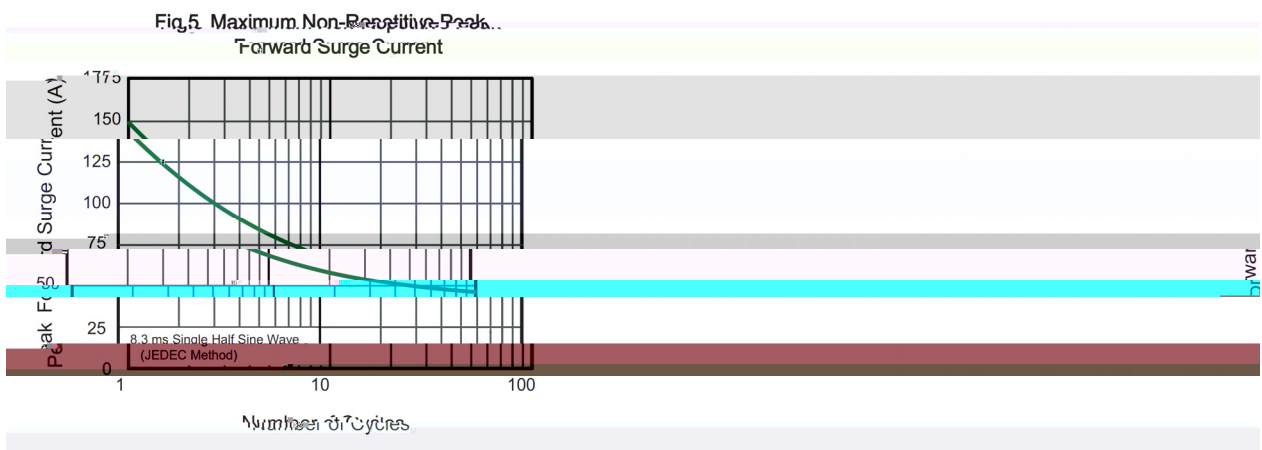
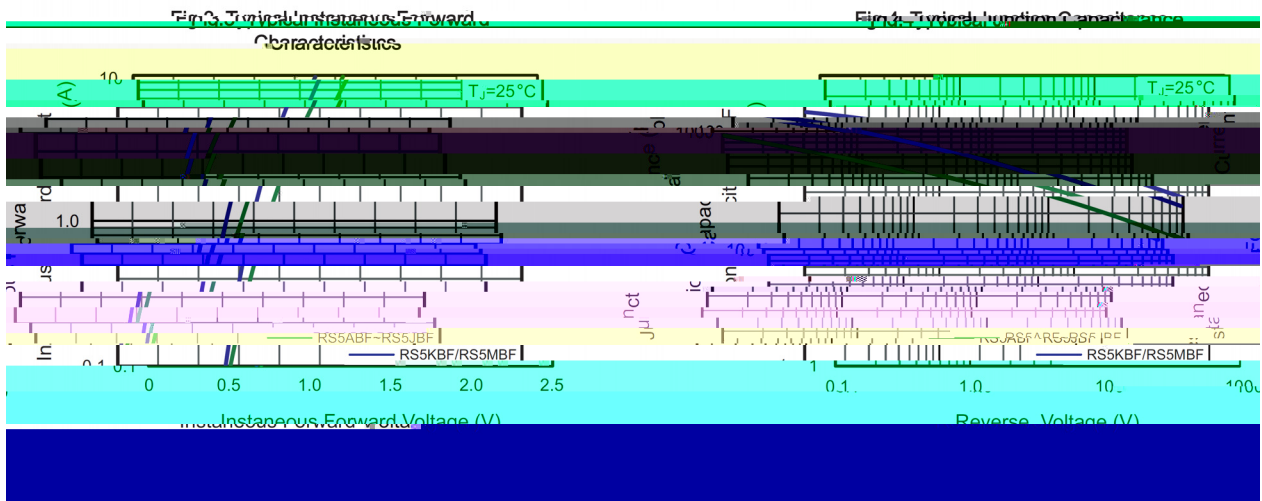
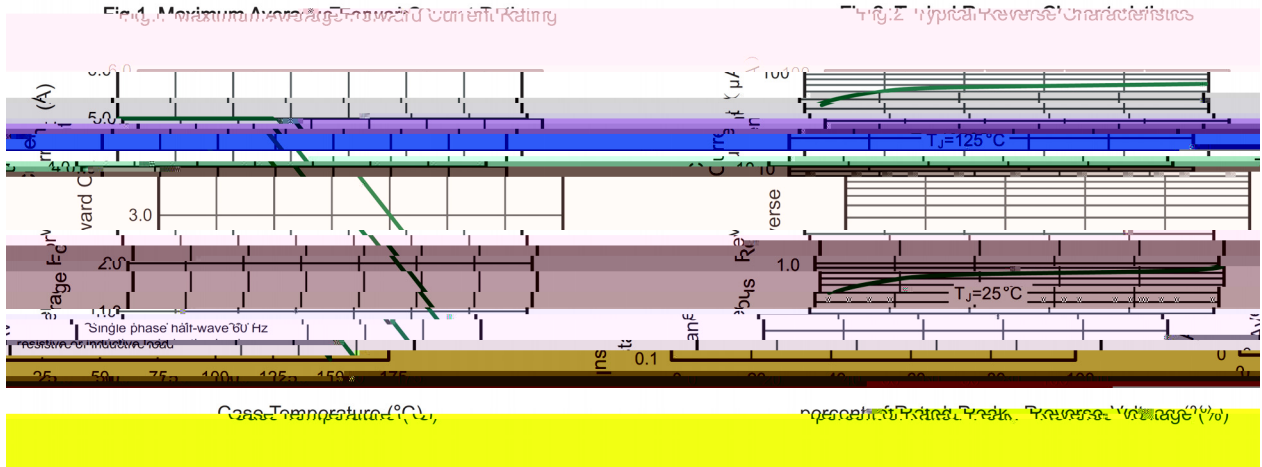
Note:

- 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 _F	I _F =5A	1.3						V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	T _a =25	10						μA
		T _a =125	150						μA
Maximum Reverse Recovery Time	t _{rr}	I _F =0.5A I _R =1A I _{rr} =0.25A	150			250	500		ns

/ Electrical Characteristic Curve



/ Marking Instructions



R5AB

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 ³)		
	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