



SPECIFICATION FOR APPROVAL

cus	TOMER'S APPROVAL CHOP	
Approval's condition:		
Approved date:		

KINDLY RETURN A SET WITH YOUR COMPANY'S OFFICIAL STAMP ON APPROVAL OF THIS ITEM

CUSTOMER'S NAME:			
CUSTOMER'S MODEL NO.:			
CUSTOMER'S PART NO.:			
DESCRIPTION:	5G n78 1	5.9mm DR Filter	
Semitel'S MODEL NO.:	SE8R355	50B500_15.9_031	
VERSION:		03	
DATE:	2	025/2/19	
Attachments:	Prepared By	Checked By	Approved By
■ Product Specification	Hoho Dong	Liona Wona	Eric Chang
■ Sample Qty. :	Hebe Deng 2025/2/19	Liang Wong 2025/2/19	Eric Chang 2025/2/19
☐ Test Data			

Semitel International Ltd.,	TEL: 886-2-86922121	FAX: 886-2-26483379
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Revision Record

Version	Revision Date	Before change	After change
1	2024/6/27	VSWR in BW 1.8:1	Return Loss 15dB min.
2	2025/2/12	Avg. Input Power 3W	Max input power 100W(C type)
3	2025/2/19	Add informations	Packing and IR reflow information

Semitel'S MODEL NO. :	SE8R3550B500_15.9_031	CUSTOMER'S MODEL NO. :	
VERSION:	03	CUSTOMER'S PART NO. :	
DATE:	2025/2/19		





1.FEATURES

- Small Size, Light weight
- SMT package soldering
- Ideal for Microwave telecommunication

2.SPECIFICATIONS

	ELECTRICAL SPECIFICATIONS			
NO	ITEM	SPEC	Unit	
1	Center Frequency [fo]	3550	MHz	
2	Bandwidth [BW]	fo ±250[3300~3800]	MHz	
3	Insertion in BW	2.0 max.@25 °C	dB	
	Inscrion in DW	2.3max.@-40°C to +105°C	u b	
4	Ripple in BW	1.5 max.	dB	
5	Return Loss in BW(S11,S22)	15 min.	dB	
6	In/Out Impedance	50	Ω	
7	Attenuation[Absolute Value]	20 min. @ DC~3240 MHz	dB	
,	Attendation[/issolute value]	20 min. @ 3860~5000 MHz	dB	
8	Operation Temperature Range	-40°C to +105°C		
9	Max Input Power	100W(C type)		
10	Measurement Semitel	MC44R		

[^] All Parameters are measured with 50Ω system at +25 $^{\circ}\!\mathrm{C}^{}$ if not specified.

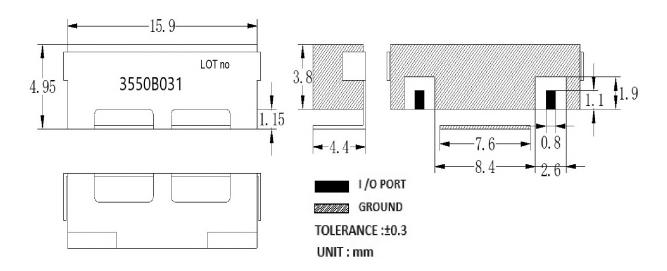
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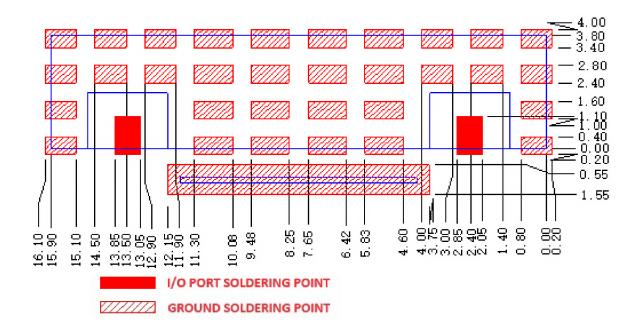


3.OUTLINE DRAWING and Weight

- 3.1. Filter drawing
- 3.2. P/N SE8R3550B500_15.9_031 marking information as (marking showing 3550Bxxx, xxx=01~99 mean for project series code.)
- 3.3. Unit weight: 1.4g



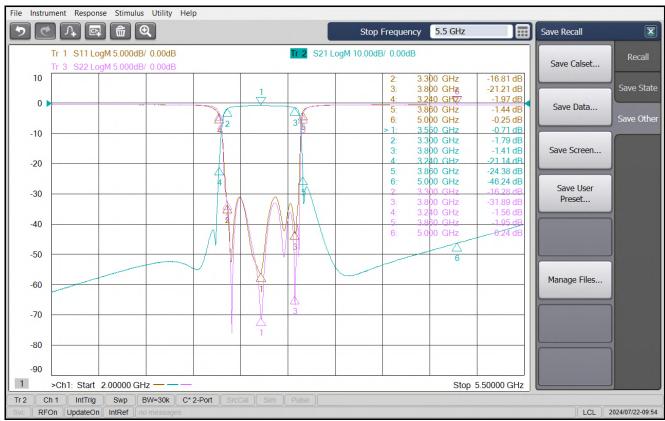
4. RECOMMENDED PC BOARD PATTERN

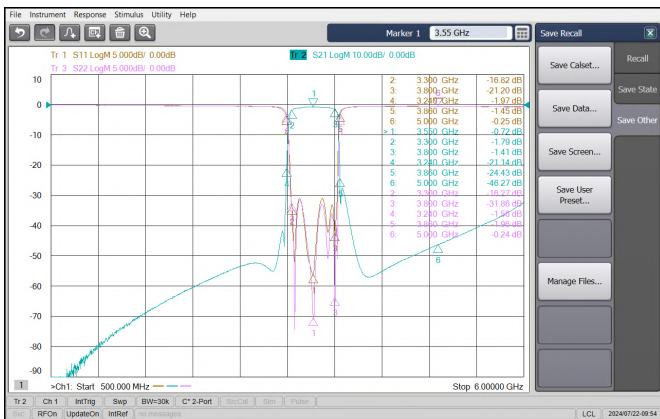


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5.FREQUENCY RESPONSE





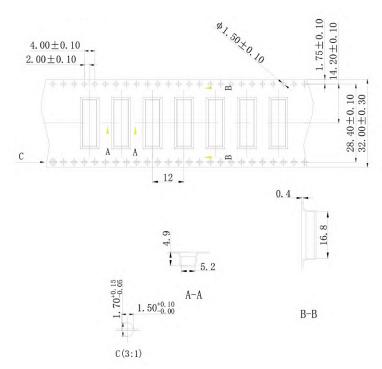
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6.Tape and Reel Dimension

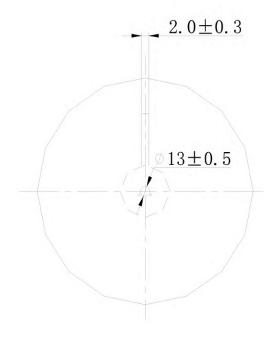
6.1.Quantity per reel:500pcs

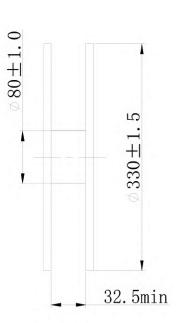
6.2.Taping Dimension



Unit: mm

6.3. Reel Dimension





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7.Environmental Test

7.1 Vibration Resist

The device should satisfy the electrical characteristics after applied to the vibration of 10 to 55Hz with amplitude of 1.5mm for 2 hours each in X, Y and Z directions.

7.2 Steady Damp Heat Test

The device should satisfy the electrical characteristics after exposed to the temperature 40

 $\pm 2\,^{\circ}\text{C}$ and the relative humidity 90~95% RH for 96 hours and 1~2 hours recovery time under

normal condition.

7.3 High Temperature Storage

The device should satisfy the electrical characteristics after exposed to temperature 85±

5°Cf or 96±2 hours and 1~2 hours recovery time under normal temperature.

7.4 Low Temperature Storage

The device should also satisfy the electrical characteristics after exposed to the temperature

 $40^{\circ}\text{C}\pm5^{\circ}\text{C}$ for 96±2 hours and to 2 hours recovery time under normal temperature.

7.5 Thermal Shock

The device should also satisfy the electrical characteristics after exposed to the low temperature -40 $^{\circ}$ C and high temperature +85 $^{\circ}$ C for 30±2 min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.

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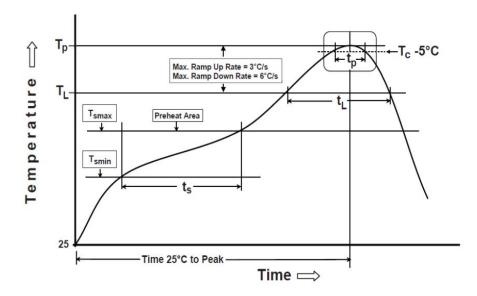




8. Notice

- 1. RoHS 2.0
- 2. MSL-2a
- 3. Reflow temperature recommendation

Profile feature		Pb-Free Assembly(SnAgCu)
	Temperature Min(Tsmin)	150°C
PREHEAT	Temperature Max(Tsmax)	200°C
	Time(ts) (from Tsmin to Tsmax)	60-120 seconds
RAMP-UP	Ramp-up rate (TL to TP)	3 °C/second max.
REFLOW	Liquidus Temperature(TL) Total Time maintained above TL (t L)	217°C 30-100 seconds
PEAK	Temperature(TP)	250°C
PEAK	Time (tp)	25 seconds
RAMP-DOWN	Ramp-down rate (TP to TL)	6 °C / second max.
Time (from 25°C t	to Peak Temperature) 25°C	8 minutes max.



This product may not be used in the following environments:

- 1. Ambient air containing corrosive gas and volatile or combustible gas.
- 2.In liquid and in environments with a high concentration of airborne particles.

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