



SPECIFICATION FOR APPROVAL

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Approved date:		
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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 n79 1	5.9mm DR Filter	
Semitel'S MODEL NO. :	SE8R470	00B600_15.9_029	
VERSION:		02	
DATE:	2	025/2/19	
Attachments:	Prepared By	Checked By	Approved By
□ Product Specification		1: \	F : 0I
■ 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

Revision Date	Before change	After change
2024/6/27	VSWR in BW 1.8:1	Return Loss 13dB min.
2025/2/12	Avg. Input Power 3W	Max input power 100W(C type)
2025/2/12	Add informations	Packing and IR reflow information
	2024/6/27	2024/6/27 VSWR in BW 1.8:1 2025/2/12 Avg. Input Power 3W

Semitel'S MODEL NO. :	SE8R4700B600_15.9_029	CUSTOMER'S MODEL NO. :	
VERSION:	02	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		
	ITEM	SPEC	Unit
1	Center Frequency [fo]	4700	MHz
2	Bandwidth [BW]	fo ±300[4400~5000]	MHz
3	Insertion in BW	2.0 max.	dB
4	Ripple in BW	1.5 max.	dB
5	Return Loss in BW (S11,S22)	13 min.	dB
6	In/Out Impedance	50 Ω	
		40 dB min. @ 3800~4100 MH	z
7	Attenuation[Absolute Value]	15 dB min. @ 4250~4300 MH	z
		30 dB min. @ 5340~5640 MH	z
8	Operation Temperature Range	-40℃ to +105℃	
9	Max Input Power	100 max.(C type)	
10	Measurement Semitel	44R	

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

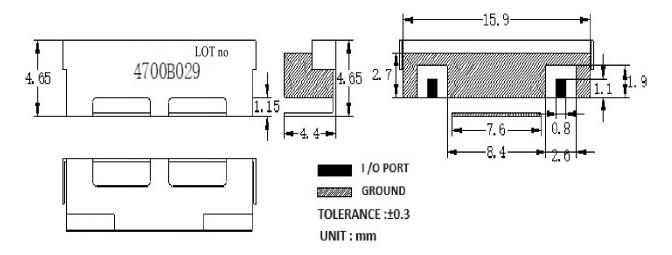
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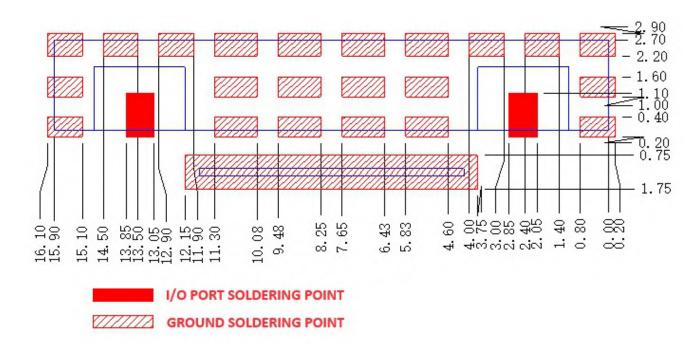


3.OUTLINE DRAWING and Weight

- 3.1. Filter drawing
- 3.2. P/N SE8R4700B600_15.9_029 Marking information as (marking showing 4700Bxxx, xxx=01~99 mean for project series code.)
- 3.3. Unit weight: 0.9g



4.RECOMMENDED PC BOARD PATTERN

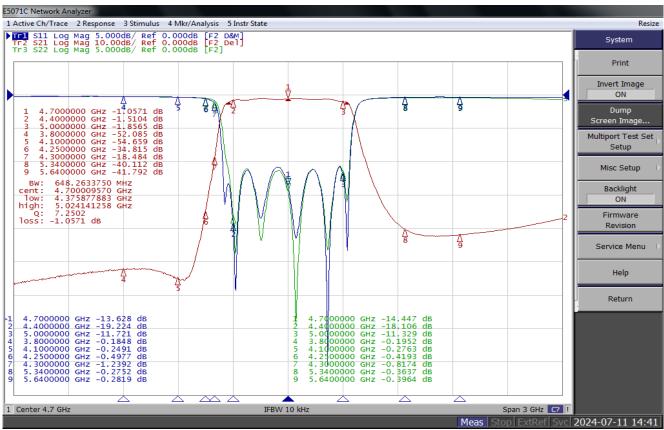


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5.FREQUENCY RESPONSE





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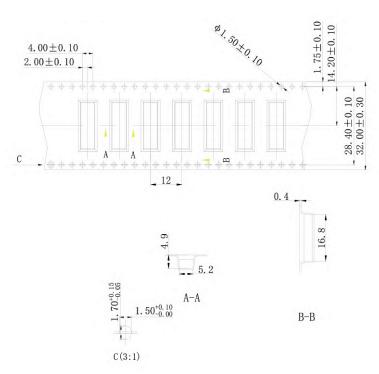




6.Tape and Reel Dimension

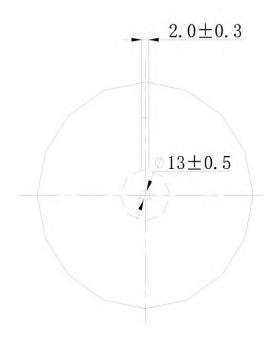
6.1. Quantity per reel:500pcs

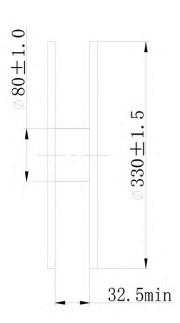
6.2.Taping Dimension



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

±2°Cand 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.

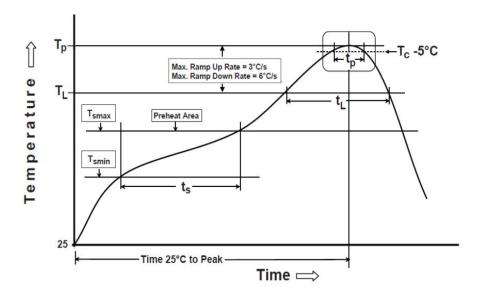
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8. Notice

- 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 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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