

SPECIFICATION FOR APPROVAL

<p>CUSTOMER'S APPROVAL CHOP</p> <p>Approval's condition: _____</p> <p>Approved date: _____</p>
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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: **Dielectric Filter**

Semitel'S MODEL NO. : **SE4R1400B100_19.6_051**

VERSION: **A**

DATE: **2024/12/10**

Attachments:

- Product Specification
- Sample Qty. :
- Test Data


Prepared By	Checked By	Approved By
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FEATURES

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

SPECIFICATIONS

ELECTRICAL SPECIFICATIONS			
NO	ITEM	SPEC	Unit
1	Center Frequency [fo]	1400	MHz
2	Bandwidth [BW]	fo ± 50[1350~1450]	MHz
3	Insertion Loss in BW	1.5 max. @常温	dB
4		1.7 max. @高低温	dB
5	Ripple in BW	0.8 max	dB
6	VSWR in BW	1.5 : 1 max.	ratio
7		5W	
8	In/Out Impedance	50 Ω	
9	Attenuation[Absolute Value]	40 dB min.@ 0~1200 MHz	
10		40 dB min.@ 1600~2000 MHz	
11	Operation Temperature Range	-40℃ to +105℃	
12	Measurement Semitel	MC64R	

^ All Parameters are measured with 50Ω system at +25℃ if not specified.

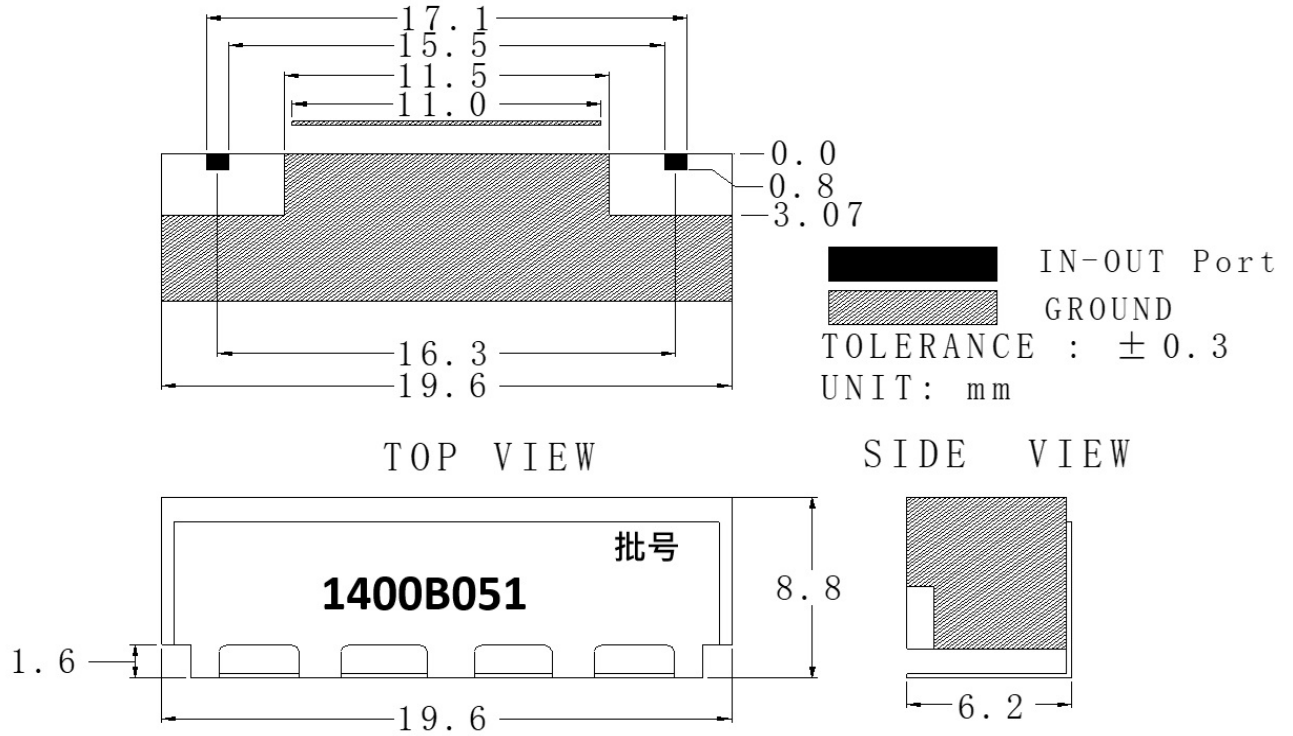
Semitel'S MODEL NO. :	SE4R1400B100_19.6_051	CUSTOMER'S MODEL NO. :	
VERSION:	A	CUSTOMER'S PART NO. :	
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3.OUTLINE DRAWING

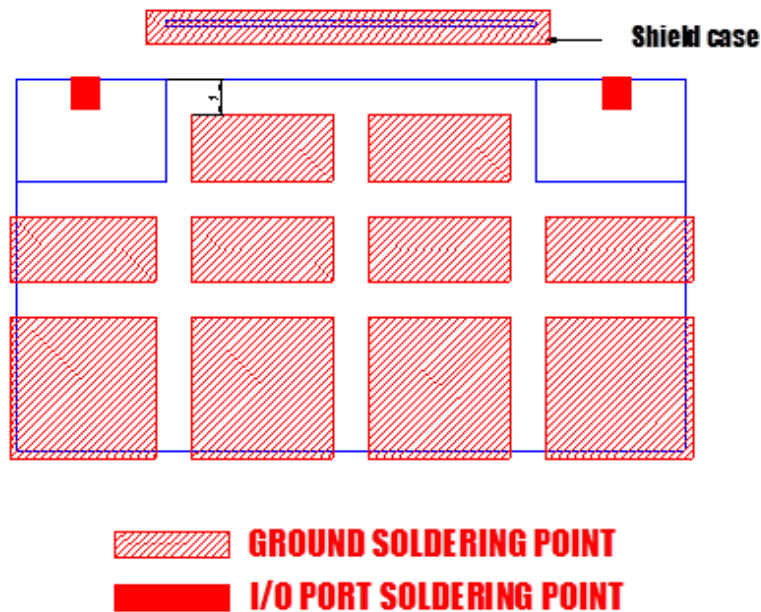
3.1. Filter drawing

3.2. SE4R1400B100_19.6_051

(marking showing 1400Bxxx, xxx=01~99 mean for project series code.)

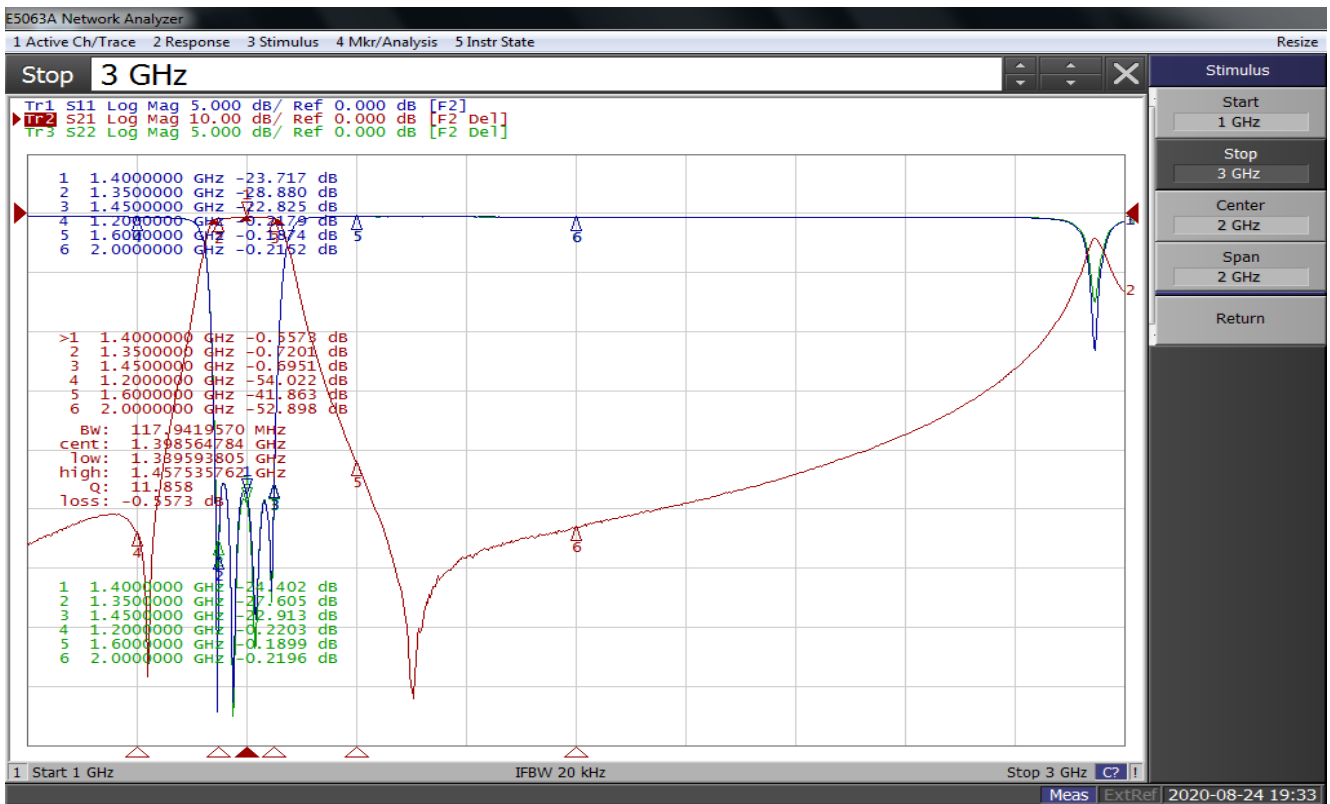
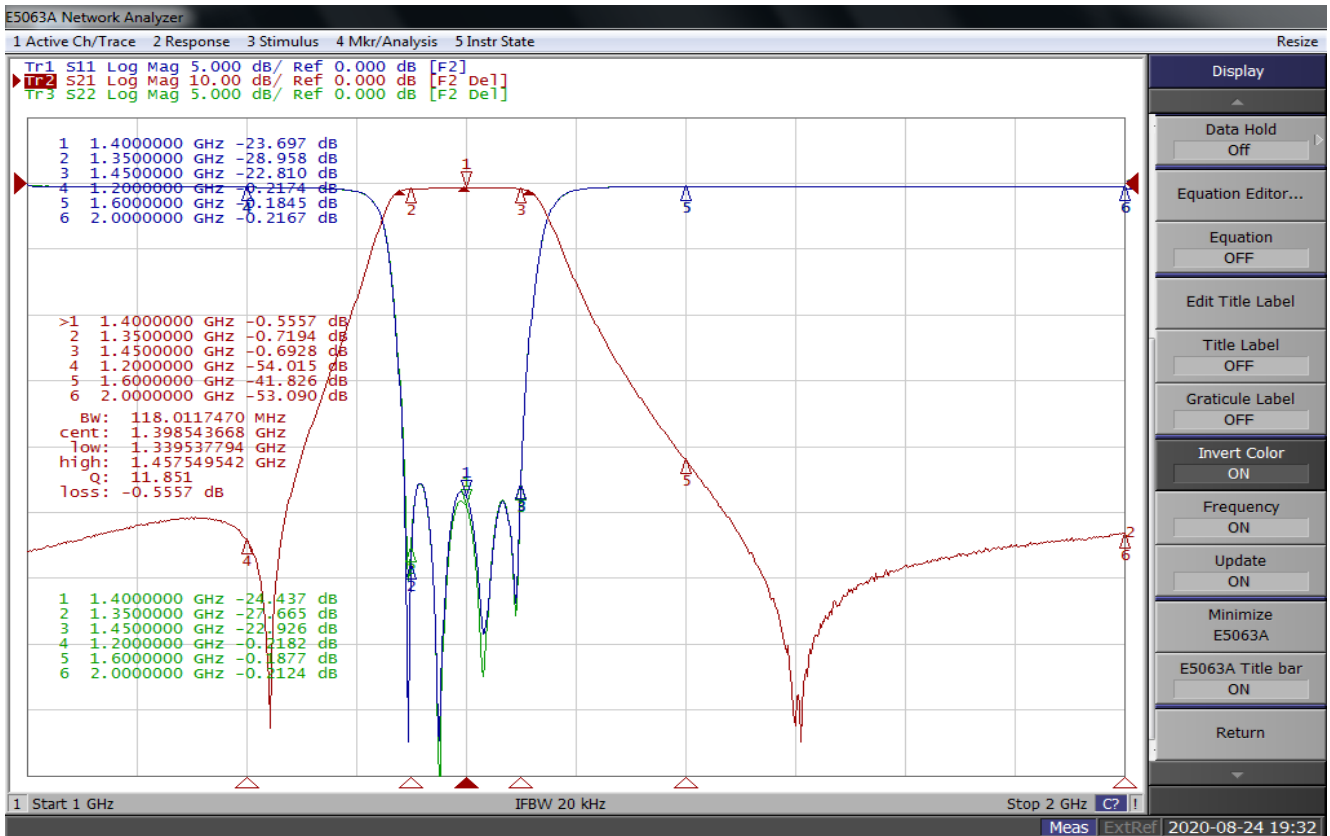


4.RECOMMENDED PC BOARD PATTERN



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5.FREQUENCY RESPONSE



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6.Environmental Test

6.1 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.

6.2 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.

6.3 High Temperature Storage

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

5 $^{\circ}\text{C}$ f or 96 \pm 2 hours and 1~2 hours recovery time under normal temperature.

6.4 Low Temperature Storage

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

-40 $^{\circ}\text{C}$ \pm 5 $^{\circ}\text{C}$ for 96 \pm 2 hours and to 2 hours recovery time under normal temperature.

6.5 Thermal Shock

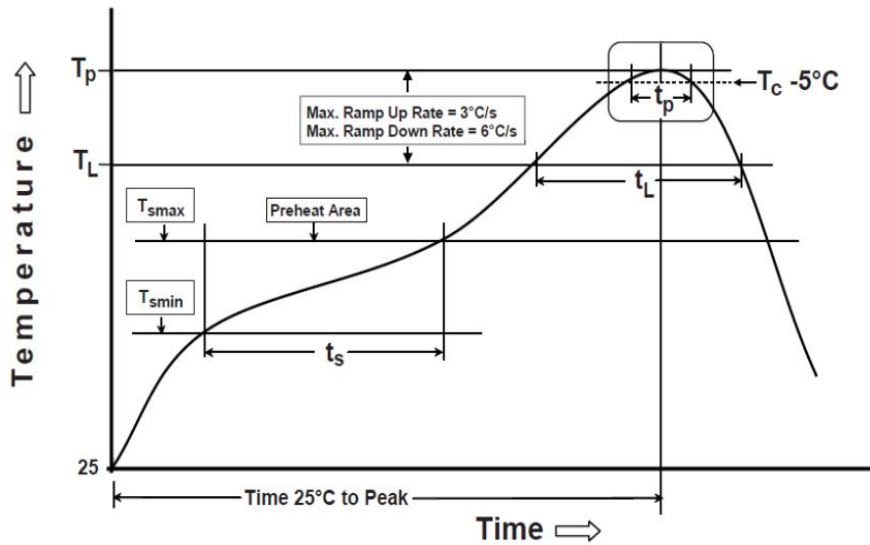
The device should also satisfy the electrical characteristics after exposed to the low temperature -40 $^{\circ}\text{C}$ and high temperature +85 $^{\circ}\text{C}$ for 30 \pm 2 min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.

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7. Notice

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

Profile feature		Pb-Free Assembly(SnAgCu)
PREHEAT	Temperature Min(Tsmin)	150°C
	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)	217°C
	Total Time maintained above TL (t L)	30-100 seconds
PEAK	Temperature(TP)	250°C
	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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