

SPECIFICATION FOR APPROVAL

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| <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. : **SE8R4700B600_25.7_039**

VERSION: **A**

DATE: **2024/7/10**

- Attachments:**
- Product Specification
 - Sample Qty. :
 - Test Data

| Prepared By | Checked By | Approved By |
|------------------------|-------------------------|-------------------------|
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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] | 4700 | MHz |
| 2 | Bandwidth [BW] | fo±300[4400~5000] | MHz |
| 3 | Insertion Loss in BW | 1.5 max. | dB |
| 4 | Ripple in BW | 1.0 max. | dB |
| 5 | Return Loss in BW (S11, S22) | 15 min. | dB |
| 6 | Attenuation[Absolute Value] | 15 dB min. @ 4340 MHz | dB |
| | | 15 dB min. @ 5060 MHz | |
| | | 50 dB min. @ DC-3000 MHz | |
| 7 | In/Out Impedance | 50 | Ω |
| 8 | [Operation Temperature Range] | -40℃ to +105℃ | |

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

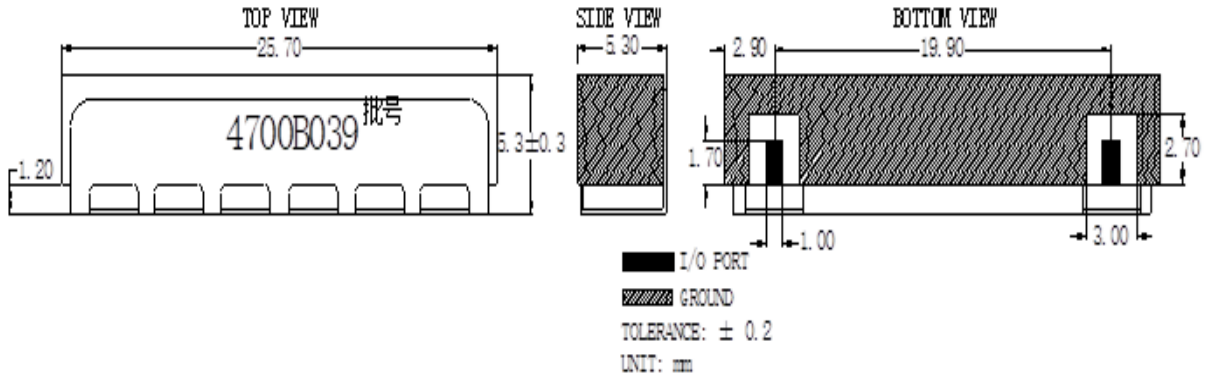
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|-----------------------|-----------------------|------------------------|--|
| Semitel'S MODEL NO. : | SE8R4700B600_25.7_039 | CUSTOMER'S MODEL NO. : | |
| VERSION: | A | CUSTOMER'S PART NO. : | |
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3.OUTLINE DRAWING

3.1. Filter drawing

3.2. SE8R4700B600_25.7_039

(marking showing 4700Bxxx, xxx=01~99 mean for project series code.)

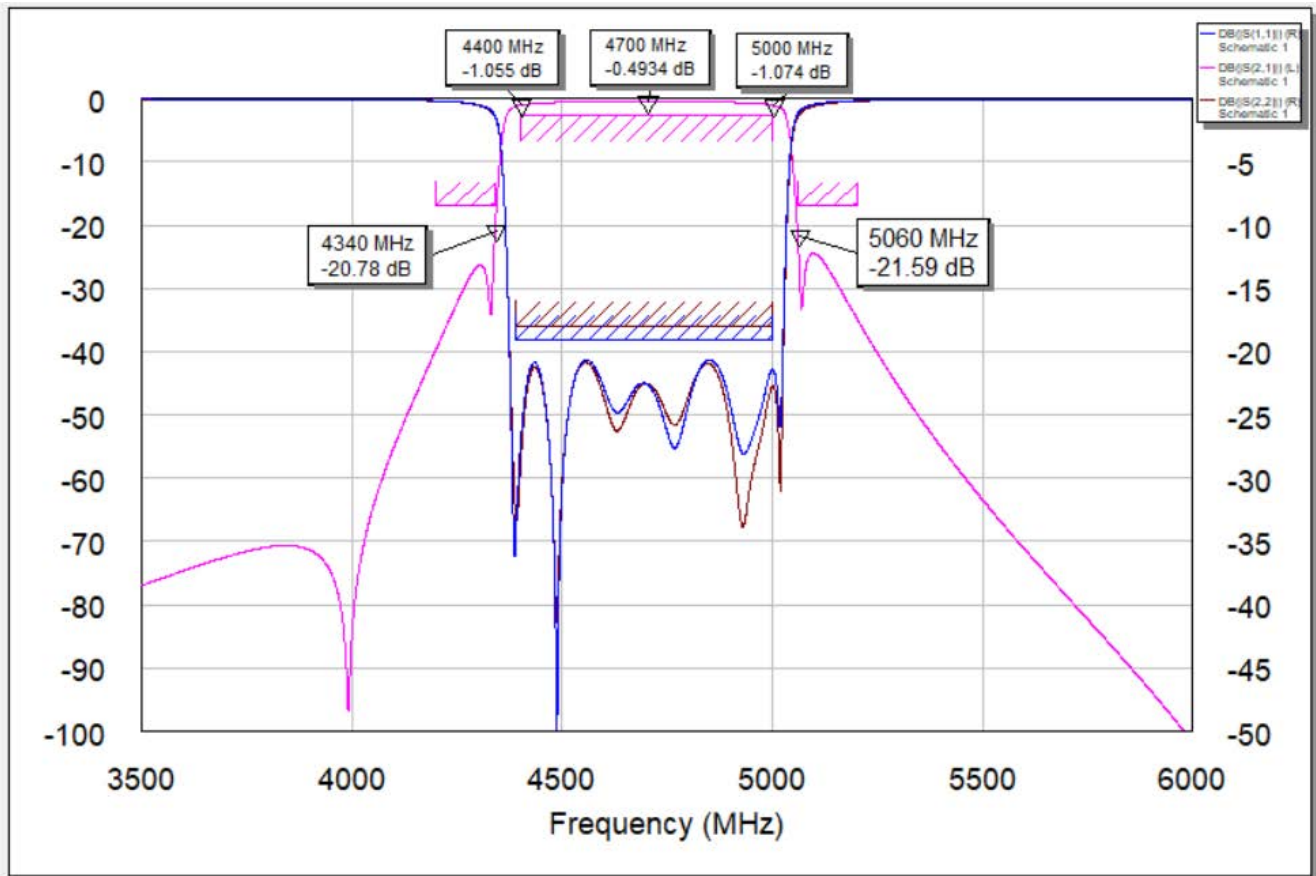


4.RECOMMENDED PC BOARD PATTERN



| | | | |
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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

±2°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±

5°Cf or 96±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°C±5°C for 96±2 hours and to 2 hours recovery time under normal temperature.

6.5 Thermal Shock

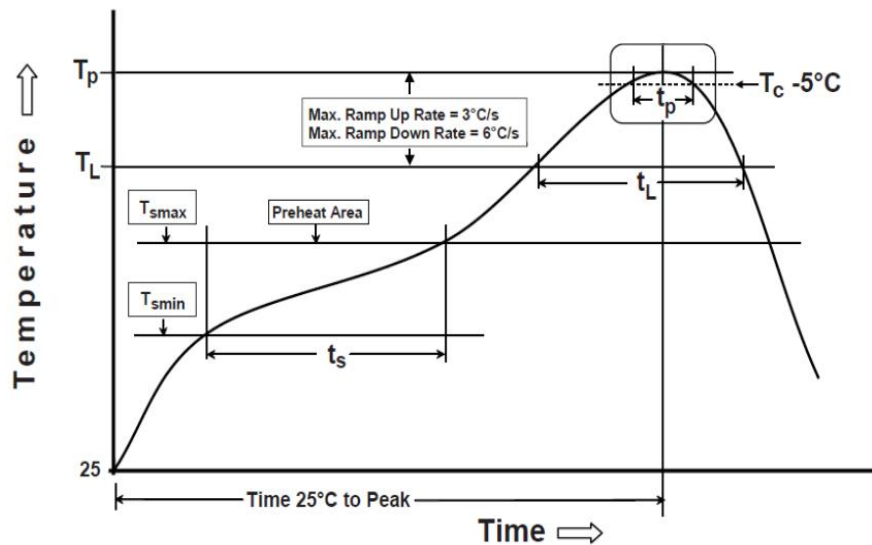
The device should also satisfy the electrical characteristics after exposed to the low temperature -40°C and high temperature +85°C for 30±2 min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.

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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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