SPECIFICATION FOR APPROVAL

CUSTOMER'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: **Dielectric Filter**

Semitel'S MODEL NO. : **SE8R2593B194_15.9_041**

VERSION: **A**

DATE: **2024/7/18**

Attachments:

- ☐ Product Specification
- ☐ Sample Qty. :
- ☐ Test Data

Prepared By	Checked By	Approved By
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Revision Record

Version	Revision Date	Revision For Items	Reason For Revision
A	2024/7/18	New Revision	-

Semitel'S MODEL NO. :	SE8R2593B194_15.9_041	CUSTOMER'S MODEL NO. :	
VERSION:	A	CUSTOMER'S PART NO. :	
DATE:	2024/7/18		

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]	2593	MHz
2	Bandwidth [BW]	fo ±97[2496~2690]	MHz
3	Insertion in BW	2.0 max.@25℃	dB
		2.3max.@-40℃ to +105℃	
4	Ripple in BW	1.5 max.	dB
5	VSWR in BW（S11，S22）	1.5:1 max.	Ratio
6	In/Out Impedance	50	Ω
7	Attenuation[Absolute Value]	35 min. @ DC~2400 MHz	dB
		20 min. @ 2400~2456 MHz	dB
		20 min. @ 2730~2750 MHz	dB
		35 min. @ 2750~4000 MHz	dB
8	Operation Temperature Range	-40℃ to +105℃	
9	Input Power	3W	

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

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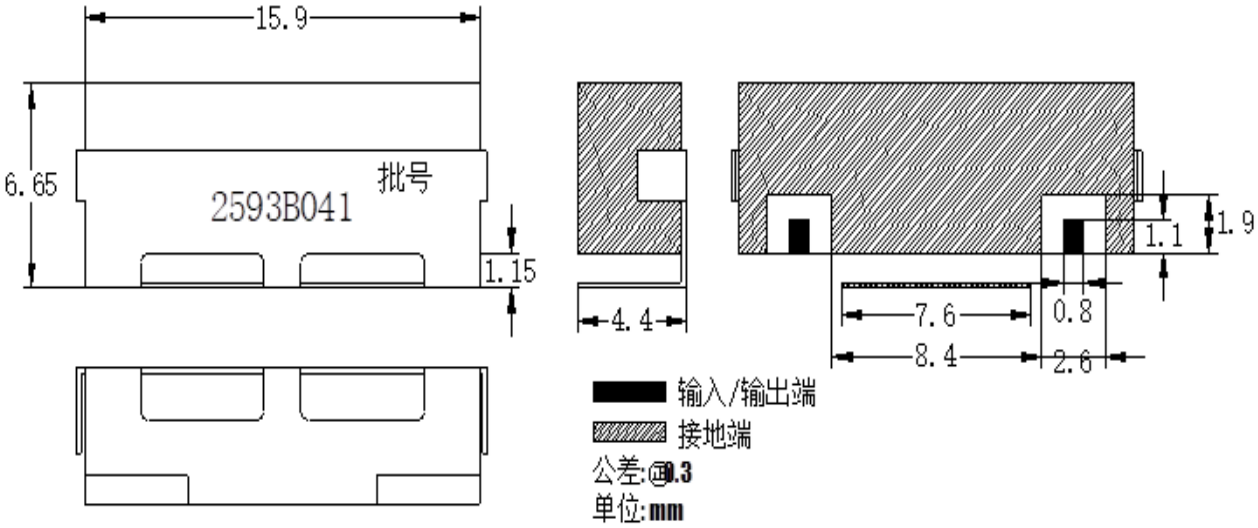
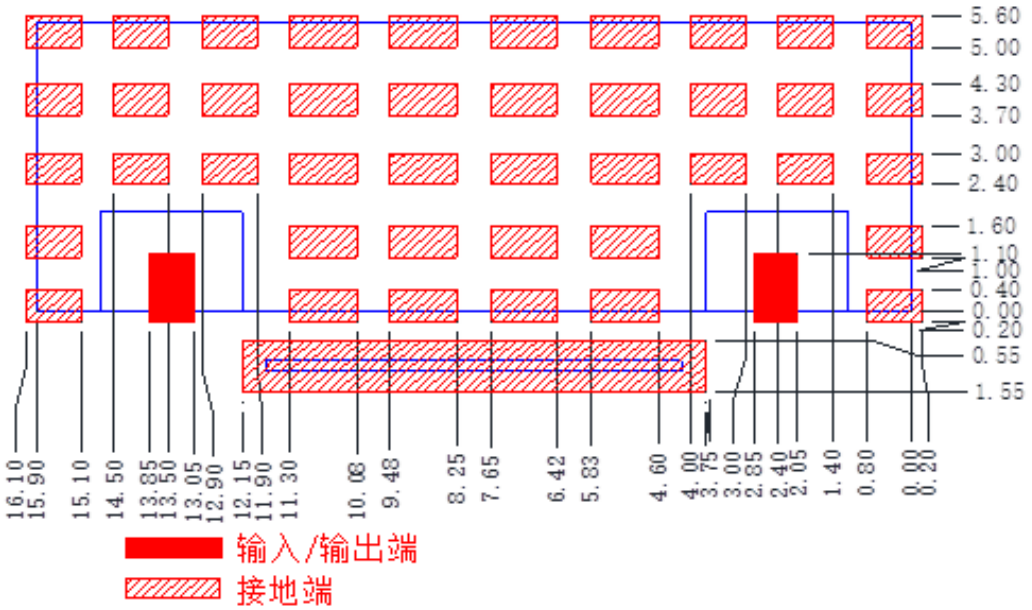
3.OUTLINE DRAWING

3.1. Filter drawing
3.2. SE8R2593B194_15.9_041
(*marking showing 2593Bxxx, xxx=01~99 mean for project series code.)*



4.RECOMMENDED PC BOARD PATTERN



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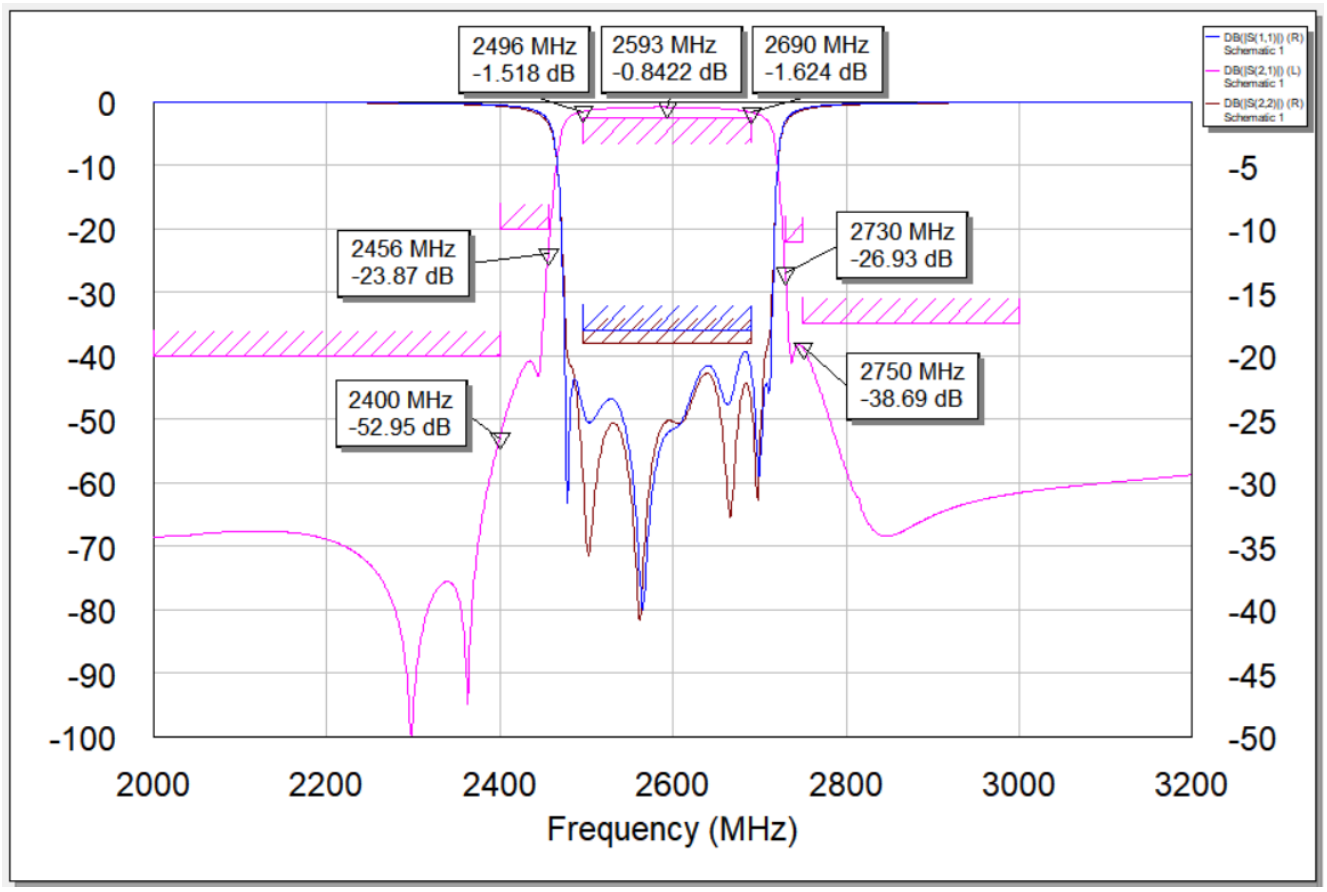
5.FREQUENCY RESPONSE



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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℃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℃f 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℃±5℃ for 96±2 hours and to 2 hours recovery time under normal temperature.

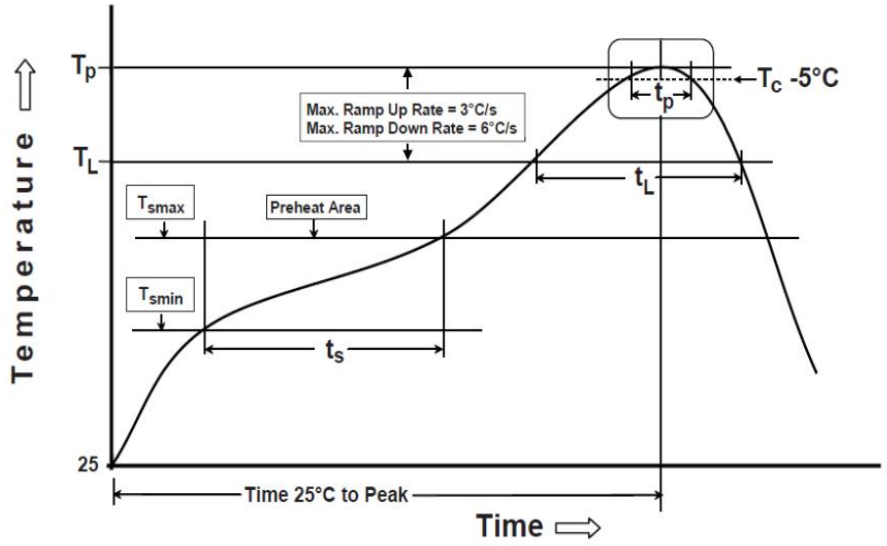
6.5 Thermal Shock

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

7.Notice

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

Profile feature		Pb-Free Assembly(SnAgCu)
PREHEAT	Temperature Min(Tsmin) Temperature Max(Tsmax) Time(ts) (from Tsmin to Tsmax)	150°C 200°C 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) Time (tp)	250°C 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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