

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: **CERAMIC MONOBLOCK FILTER**

Semitel'S MODEL NO. : **SE8R2593B194_25.7_046**

VERSION: **A**

DATE: **2024/8/2**

- 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	2024/8/2	New Revision	-

Semitel'S MODEL NO. :	SE8R2593B194_25.7_046	CUSTOMER'S MODEL NO. :	
VERSION:	A	CUSTOMER'S PART NO. :	
DATE:	2024/8/2		

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]	$f_o \pm 97[2496 \sim 2690]$	MHz
3	Insertion Loss in BW	2.0 max. @25	dB
		2.5 max. @-40 ~+85	
4	Ripple in BW	1.5 max.	dB
5	Return Loss in BW (S11, S22)	14 min.	dB
6	Attenuation[Absolute Value]	15 dB min. @ 10~2476 MHz	dB
		15 dB min. @ 2710~4500 MHz	
7	In/Out Impedance	50	Ω
8	[Operation Temperature Range]	-40°C to +105°C	
9	Input Power	8W	

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

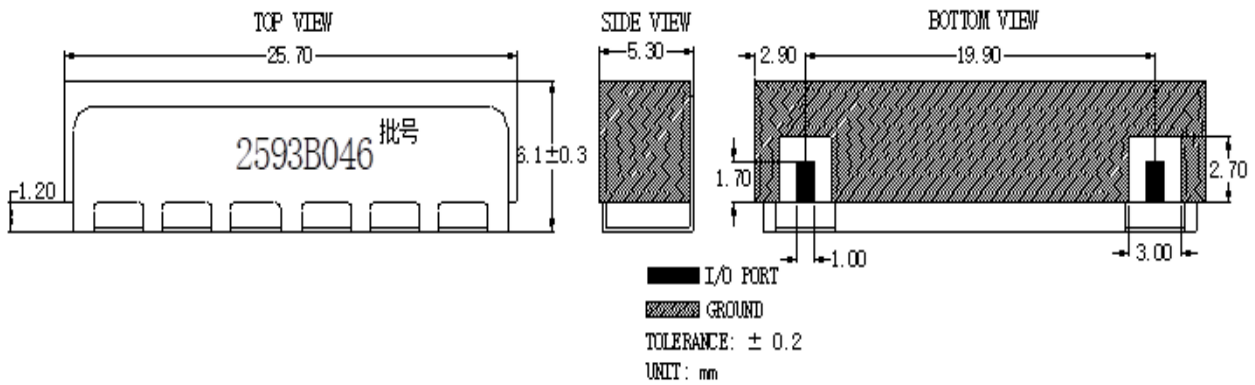
Semitel'S MODEL NO. :	SE8R2593B194_25.7_046	CUSTOMER'S MODEL NO. :	
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3.OUTLINE DRAWING

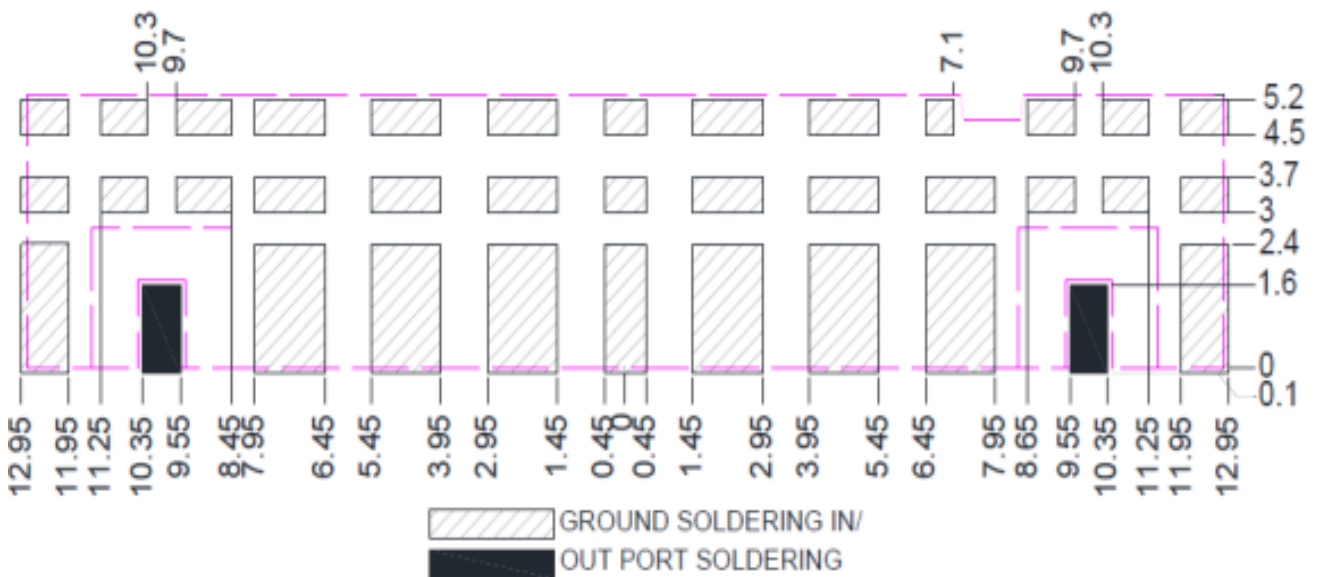
3.1. Filter drawing

3.2. SE8R2593B194_25.7_Xxx

(marking showing 8R2593Xxx= A~Z, xx=01~99 mean for project series code.)

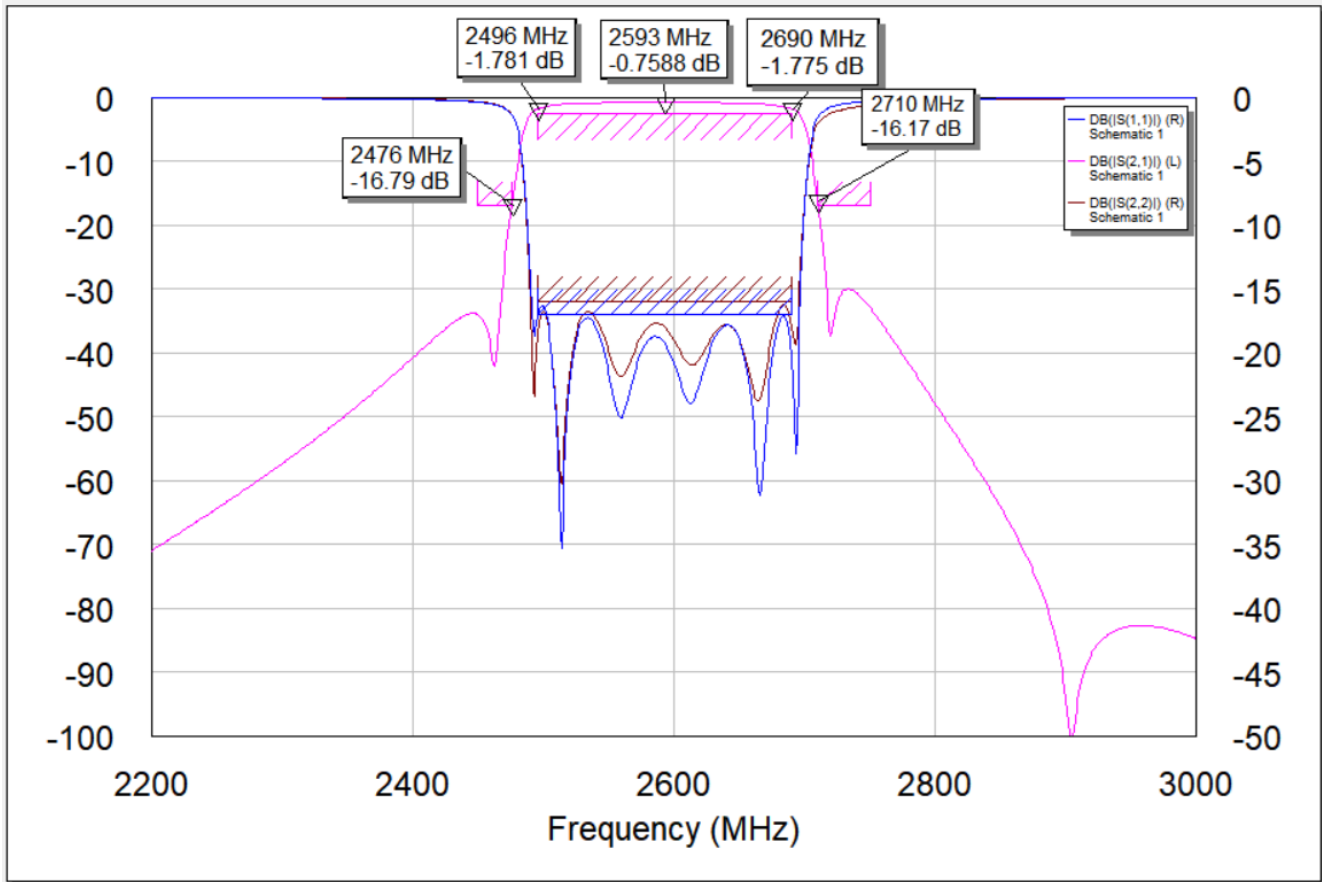


4.RECOMMENDED PC BOARD PATTERN



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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°C for 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

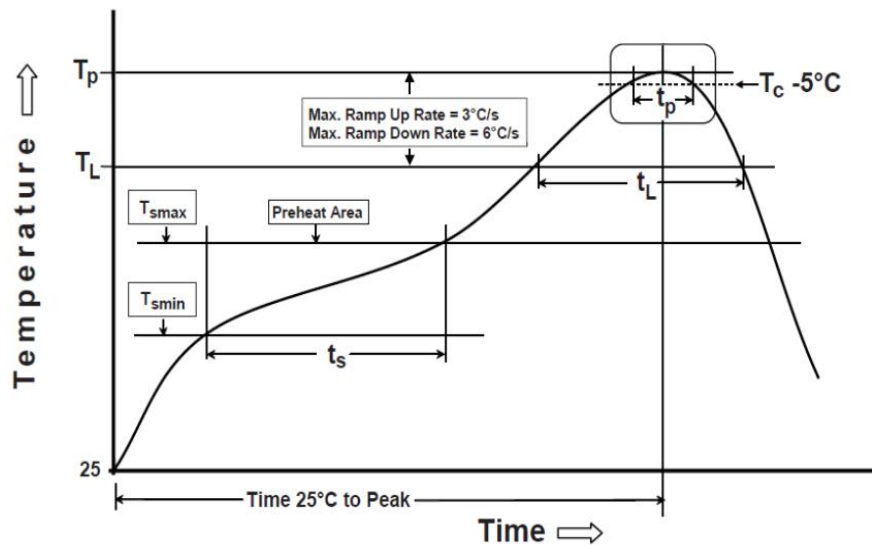
The device should also satisfy the electrical characteristics after exposed to the low temperature -40°C and high temperature $+85^{\circ}\text{C}$ for 30 \pm 2 min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.

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6. 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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