

## SPECIFICATION FOR APPROVAL

<p><b>CUSTOMER'S APPROVAL CHOP</b></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. :** **SE8R3840C280\_25.7\_040**

**VERSION:** **B**

**DATE:** **2024/8/2**

**Attachments:**

- Product Specification
- Sample Qty. :
- Test Data

Prepared By	Checked By	Approved By
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**Revision Record**

<b>Version</b>	<b>Revision Date</b>	<b>Revision For Items</b>	<b>Reason For Revision</b>
A	2024/7/17	New Revision	-
B	2024/8/2	Parameter optimization	-

<b>Semitel'S MODEL NO. :</b>	<b>SE8R3840C280_25.7_040</b>	<b>CUSTOMER'S MODEL NO. :</b>	
<b>VERSION:</b>	<b>B</b>	<b>CUSTOMER'S PART NO. :</b>	
<b>DATE:</b>	<b>2024/8/2</b>		

## 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]	3840	MHz
2	Bandwidth [BW]	fo±140[3700~3980]	MHz
3	Insertion Loss in BW	2.0max. @25℃	dB
		2.5 max. @-40℃~+105℃	
4	Ripple in BW	2.5 max.	dB
5	Return Loss in BW (S11, S22)	14 min.	dB
6	Attenuation[Absolute Value]	10 dB min. @ 10~3680 MHz	dB
		10 dB min. @ 4000~6000 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.

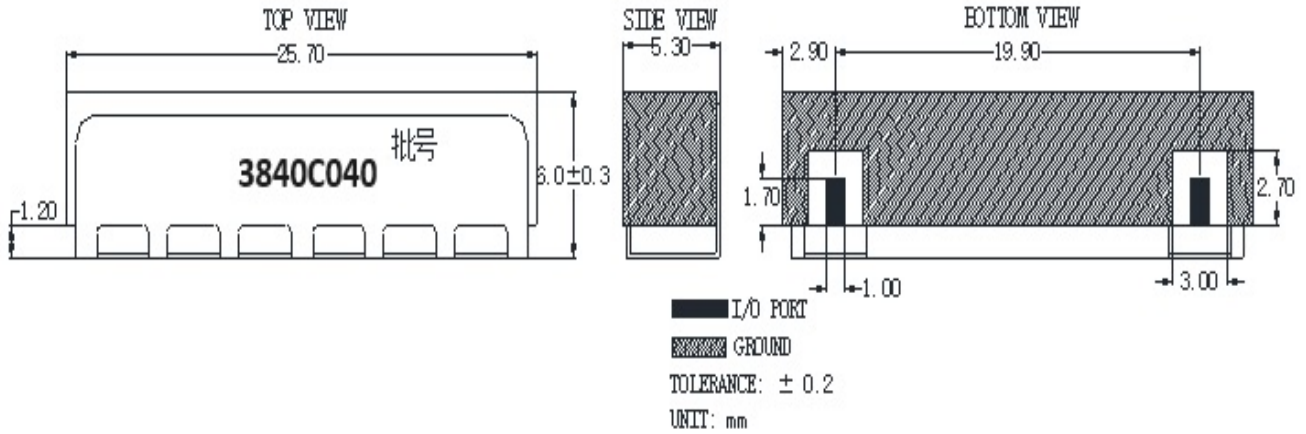
Semitel'S MODEL NO. :	SE8R3840C280_25.7_040	CUSTOMER'S MODEL NO. :	
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### 3.OUTLINE DRAWING

#### 3.1. Filter drawing

#### 3.2. SE8R3840B280\_25.7\_040

(marking showing 3840Bxxx, xxx=01~99 mean for project series code. )

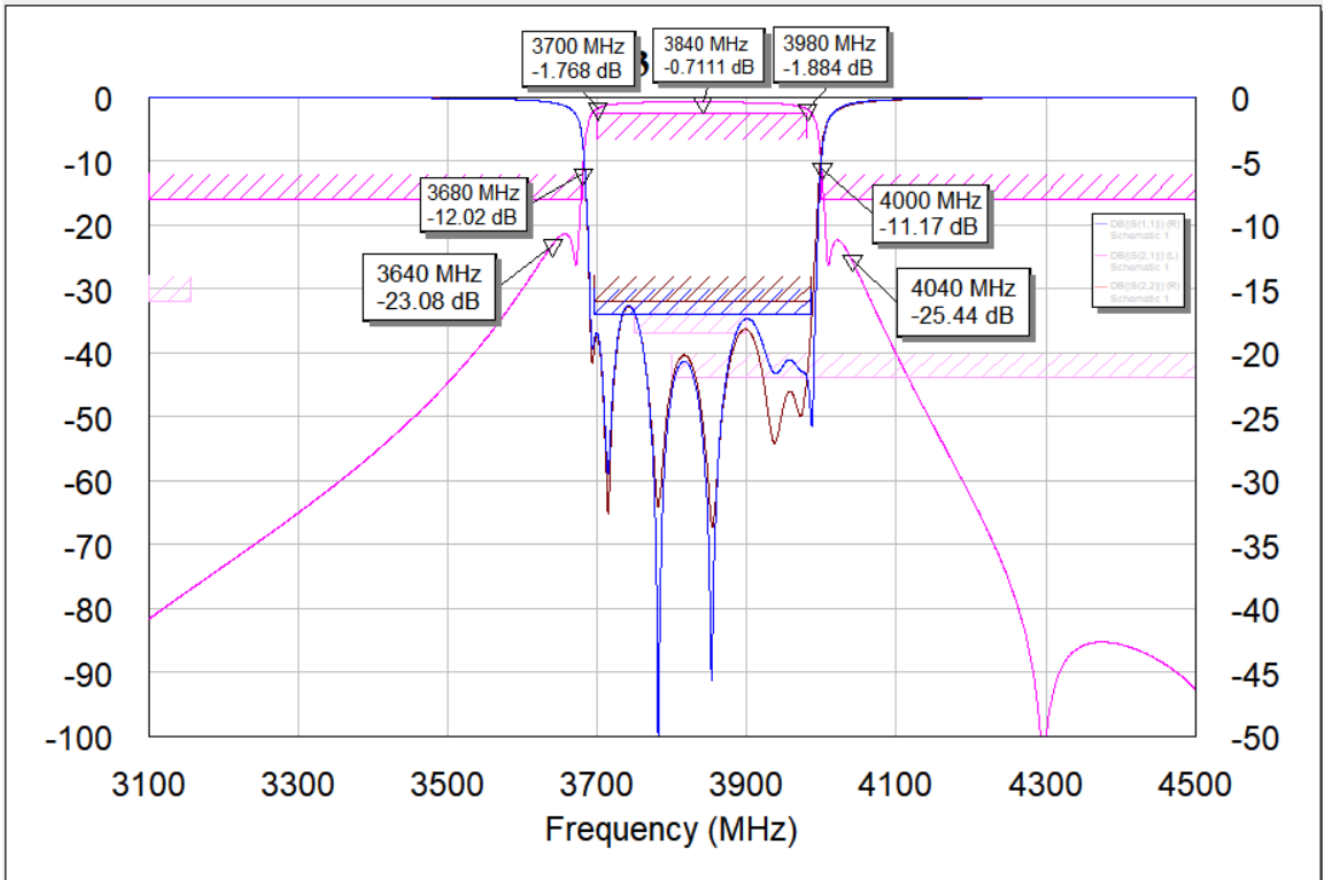


### 4.RECOMMENDED PC BOARD PATTERN



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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°C for 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

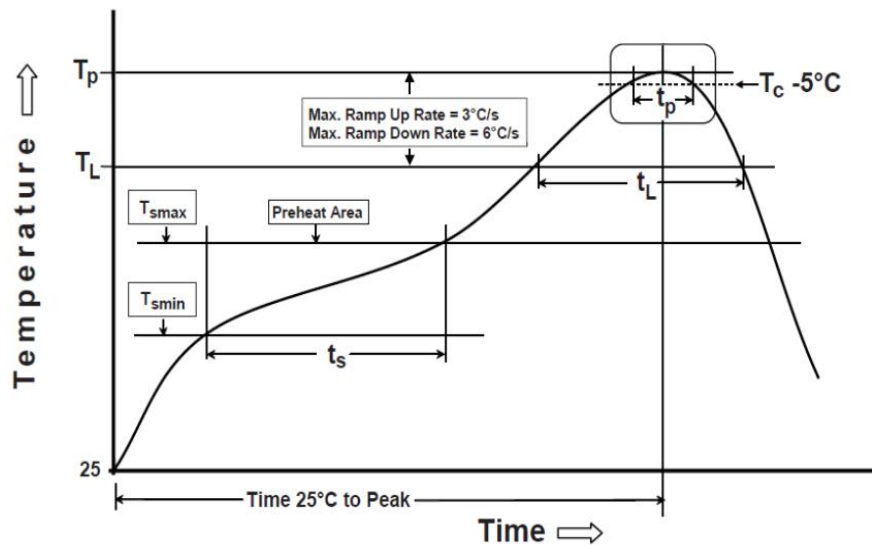
The device should also satisfy the electrical characteristics after exposed to the low temperature -40°C and high temperature +85°C for 30±2 min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.

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## 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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