

## 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. :**

**SE4R3550B500\_10.2\_085**

**VERSION:**

**01**

**DATE:**

**2025/7/10**

**Attachments:**

- ☐ Product specification
- ☐ Sample Qty.:
- ☐ Test data

Prepared By	Checked By	Approved By
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## Revision Record

[illegible]

<b>Semitel'S MODEL NO. :</b>	<b>SE4R3550B500_10.2_085</b>	<b>CUSTOMER'S MODEL NO.:</b>	
<b>VERSION :</b>	<b>01</b>	<b>CUSTOMER'S PART NO. :</b>	
<b>DATE :</b>	<b>2025/7/10</b>		

Semitel International Ltd.,

## 1.FEATURES

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

## 2.SPECIFICATIONS

ELECTRICAL SPECIFICATIONS					
NO.	ITEM		SPEC @25℃	SPEC @-40℃~+105℃	UNIT
1	Center Frequency [fo]		3550		MHz
2	Bandwidth [BW]		fo±250 [3300~3800]		MHz
3	Insertion in BW (20MHz avg.)		1.1 max.	1.2 max.	dB
4	Insertion in BW (single point)		1.3 max.	1.5 max.	dB
5	Ripple in BW		0.7 max.	0.9 max.	dB
6	Return Loss in BW (S11, S22)		11.0 min.	11.0 min.	dB
7	Attenuation [Absolute Value]	@ 1~2700 MHz	43 min.	43 min.	dB
		@ 4900~5950 MHz	37 min.	37 min.	dB
8	In/Out Impedance		50		Ω
9	Input Power		2 avg/ 20 peak		W
10	Operation Temperature Range		-40℃ to +105℃		

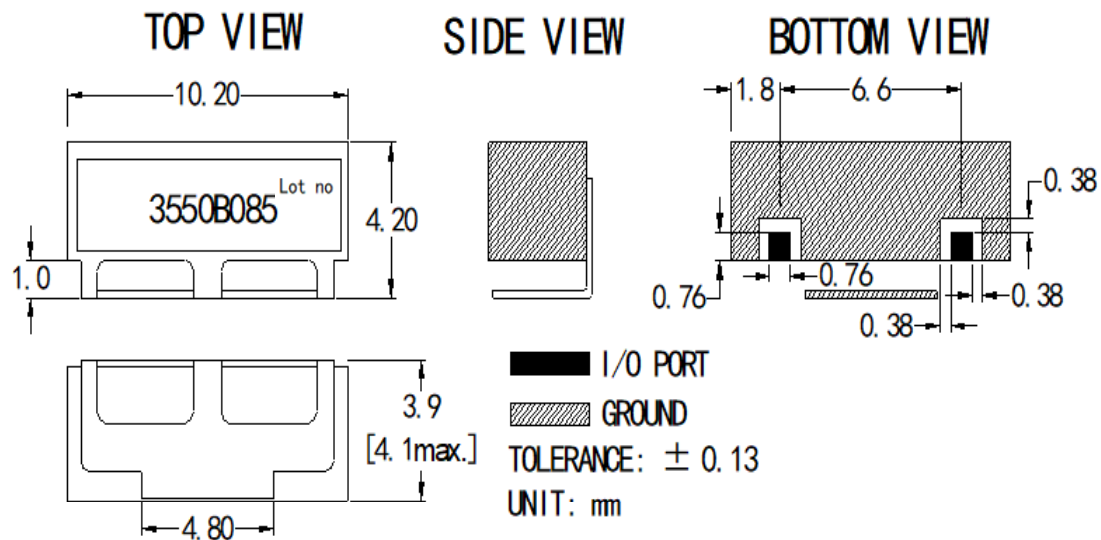
Semitel'S MODEL NO. :	SE4R3550B500_10.2_085	CUSTOMER'S MODEL NO.:	
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### 3.OUTLINE DRAWING

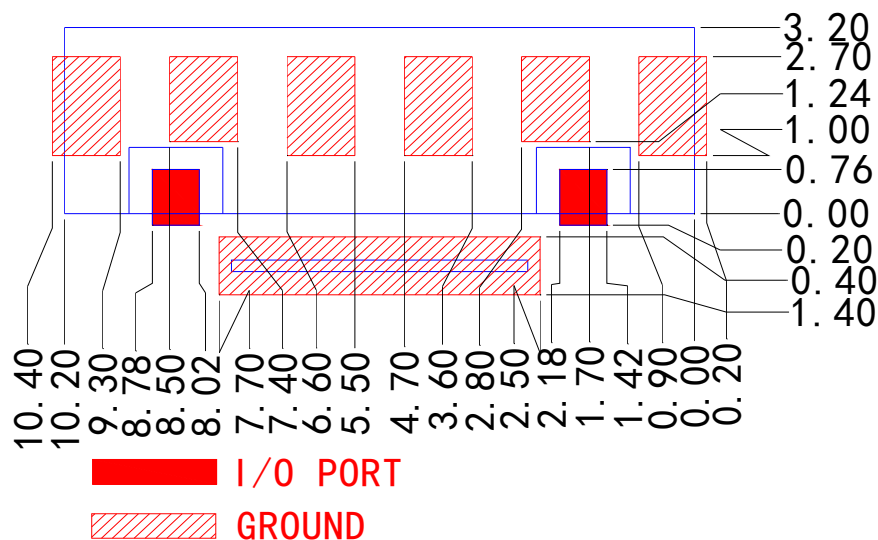
#### 3.1. Filter drawing

#### 3.2. SE4R3550B500\_10.2\_085

(marking showing 3550Bxxx, xxx=001~999 mean for project series code. )



### 4.RECOMMENDED PC BOARD PATTERN



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## 5.Environmental Test

### 5.1. 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.

### 5.2. 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.

### 5.3. High Temperature Storage

The device should satisfy the electrical characteristics after exposed to temperature  $85\pm 5^{\circ}\text{C}$  for  $96\pm 2$  hours and 1~2 hours recovery time under normal temperature.

### 5.4. 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.

### 5.5. 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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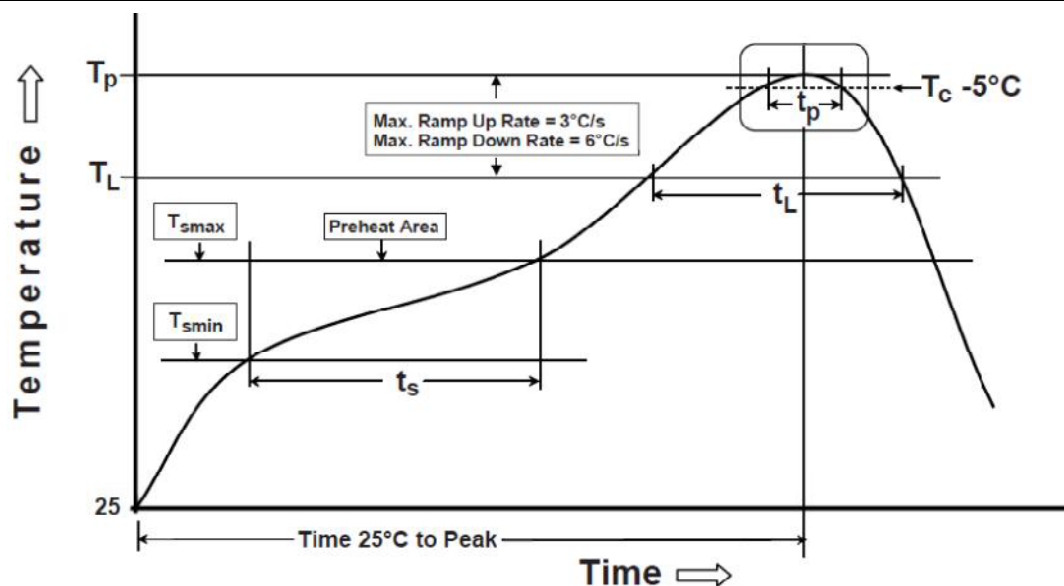
## 6.NOTICE

### 6.1. RoHS 2.0

### 6.2. MSL-1

### 6.3. 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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