

■ Test Data



# SPECIFICATION FOR APPROVAL

CUSTOMER'S APPROVAL CHOP			

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:	Die	electric Filter	
Semitel'S MODEL NO. :	SE4R140	00B100_19.6_051	
VERSION:		Α	
DATE:	2	024/12/10	
Attachments:	Prepared By	Checked By	Approved By
■ Product Specification			F : 0!
□ Sample Qty. :	Hebe Deng	Liang Wong	Eric Chang

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# **Revision Record**

Version	Revision Date	Revision For Items	Reason For Revision
A	2024/12/10	New Revision	-

Semitel'S MODEL NO. :	SE4R1400B100_19.6_051	CUSTOMER'S MODEL NO. :	
VERSION:	Α	CUSTOMER'S PART NO. :	
DATE:	2024/12/10		





# **FEATURES**

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

# **SPECIFICATIONS**

	ELECTRICAL SPECIFICATIONS				
NO	ITEM	SPEC	Unit		
1	Center Frequency [fo]	1400	MHz		
2	Bandwidth [BW]	fo ± 50[1350~1450]	MHz		
3	Insertion Loss in BW	1.5 max. @常温	dB		
4	Thisertion loss in BW	1.7 max. @高低温	dB		
5	Ripple in BW	0.8 max dB			
6	VSWR in BW	1.5 : 1 max.	ratio		
7	power capacity	5W			
8	In/Out Impedance	50 Ω			
9	Attonuation[Absolute Value]	40 dB min.@ 0~1200 MHz			
10	Attenuation[Absolute Value]	40 dB min.@ 1600~2000 MH	Z		
11	Operation Temperature Range	-40°C to +105°C			
12	Measurement Semitel	MC64R			

<sup>^</sup> All Parameters are measured with 50 $\!\Omega$  system at +25  $^\circ\! C$   $\,$  if not specified.

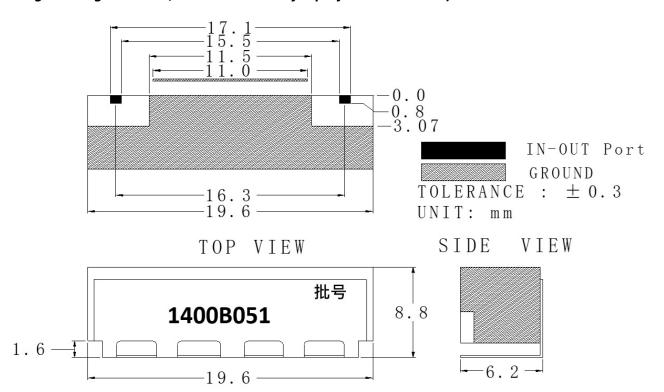
Semitel'S MODEL NO. :	SE4R1400B100_19.6_051	CUSTOMER'S MODEL NO. :	
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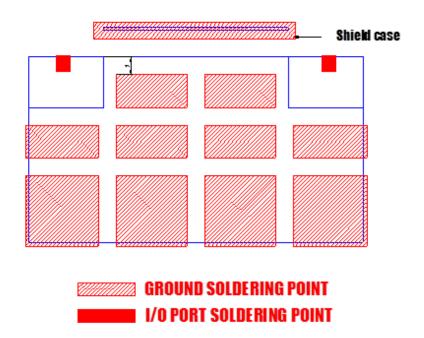
#### 3.OUTLINE DRAWING

- 3.1. Filter drawing
- 3.2. SE4R1400B100\_19.6\_051

(marking showing 1400Bxxx, xxx=01~99 mean for project series code.)



#### 4. RECOMMENDED PC BOARD PATTERN

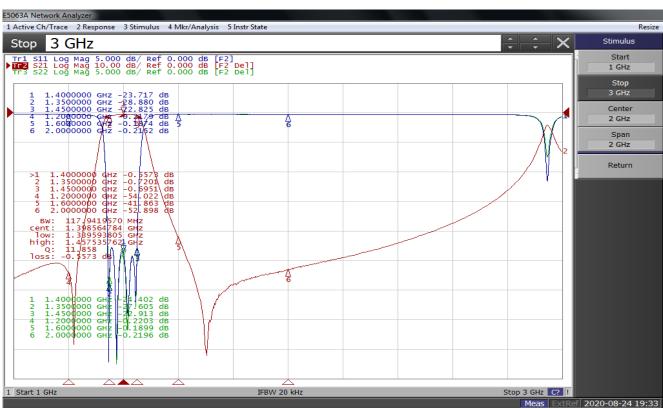


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## **5.FREQUENCY RESPONSE**





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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°Cand 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 $^{\circ}$ C and high temperature +85 $^{\circ}$ C for 30±2 min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.

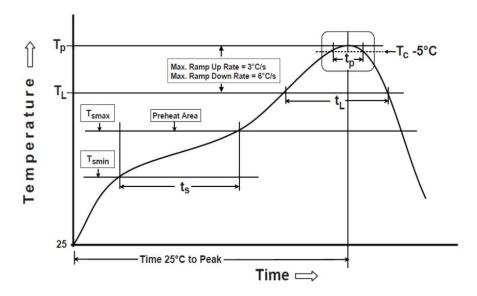
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# 7.Notice

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

Pro	Pb-Free Assembly(SnAgCu)	
	Temperature Min(Tsmin)	150°C
PREHEAT	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)  Total Time maintained above TL  (t L)	217°C 30-100 seconds
PEAK	Temperature(TP)	250°C
PEAK	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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