

**SAW Filter: 1582.470MHz**

**Model: TA2542A**

**Part No: MP10487 (AEC-Q200 compliant)**

**Rev No: 1**

**A. MAXIMUM RATING:**

Electrostatic Sensitive Device (ESD)

1. Input Power Level: 10dBm
2. DC Voltage: 3V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +105°C
5. Moisture Sensitivity Level: Level 3 (MSL3)

**B. ELECTRICAL CHARACTERISTICS:**

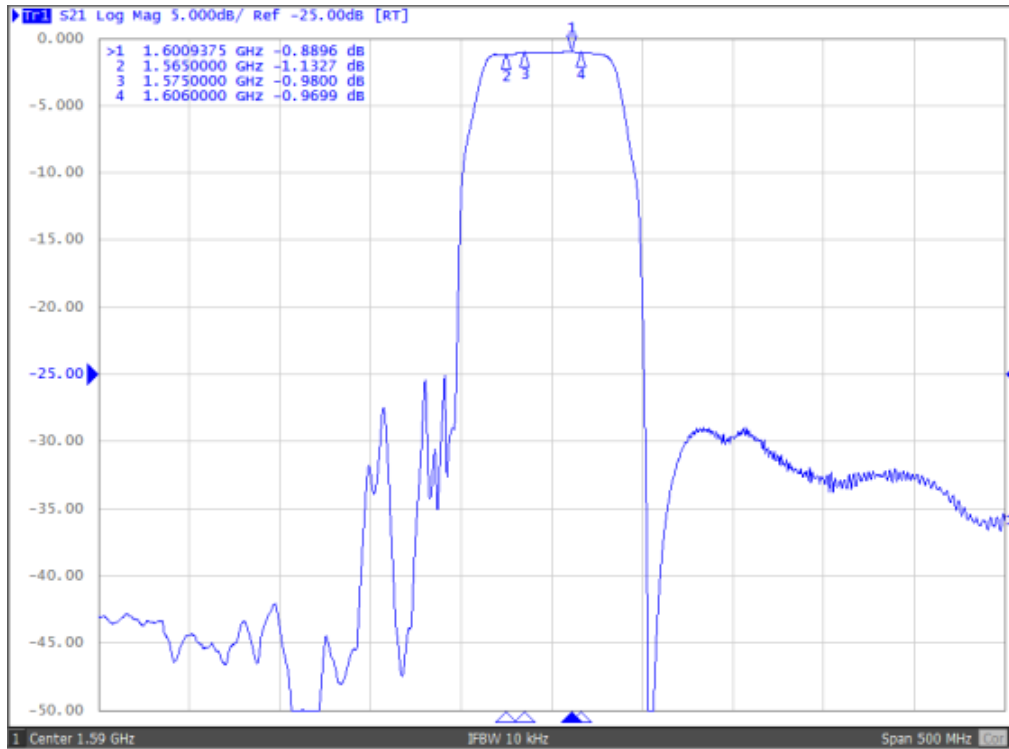
Item	Unit	Min.	Typ.	Max.
Center Frequency Fc	MHz	-	1582.47	-
Insertion Loss (1559.05 ~ 1563.15MHz) IL	dB	-	1.4	2.0
Insertion Loss (1574.39 ~ 1576.45MHz) IL			1.2	1.4
Insertion Loss (1597.55 ~ 1605.89MHz) IL			1.4	2.0
VSWR (1597.55 ~ 1605.89MHz)		-	1.5	2.0
Group Delay Variation				
1597.55 ~ 1605.89MHz	ns		5	15
Attenuation				
10 ~ 960MHz	dB	35	40	-
1427 ~ 1463MHz	dB	37	42	-
1710 ~ 1797MHz	dB	27	32	-
1850 ~ 1980MHz	dB	33	38	-
2010 ~ 2025MHz	dB	38	43	-
2305 ~ 2315MHz	dB	38	43	-
2401 ~ 2483MHz	dB	38	43	-
5160 ~ 5885MHz	dB	25	30	-
Temperature coefficient	ppm/°C	-36		
Package size	mm	SMD 1.1x0.9		

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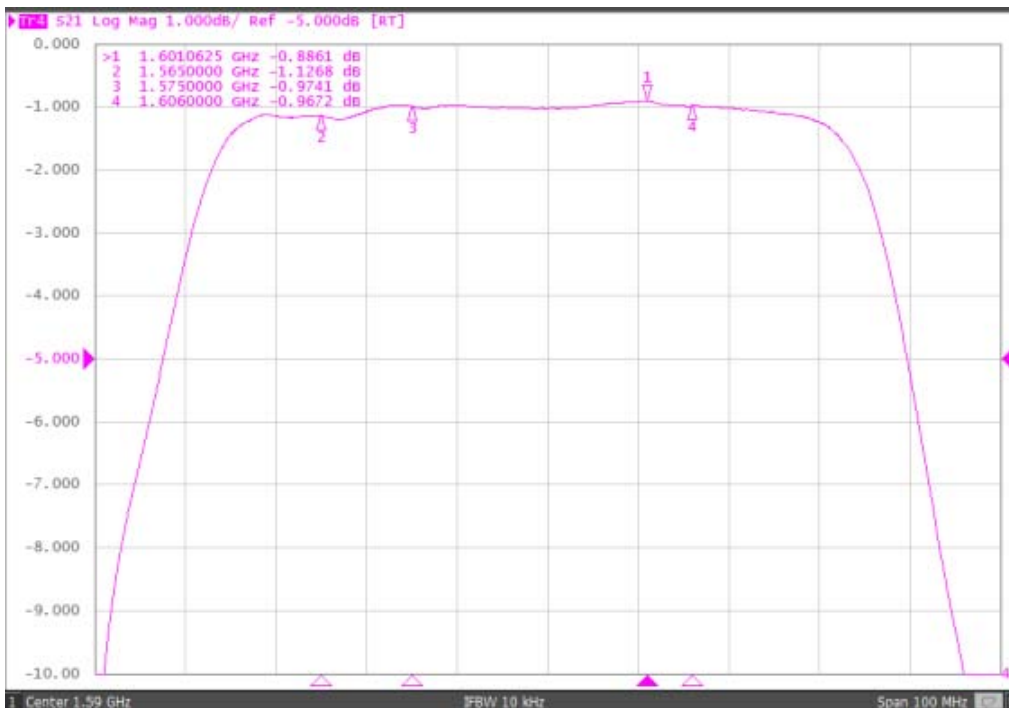
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**C. FREQUENCY CHARACTERISTICS:**

1. S21 response: (span 500MHz)



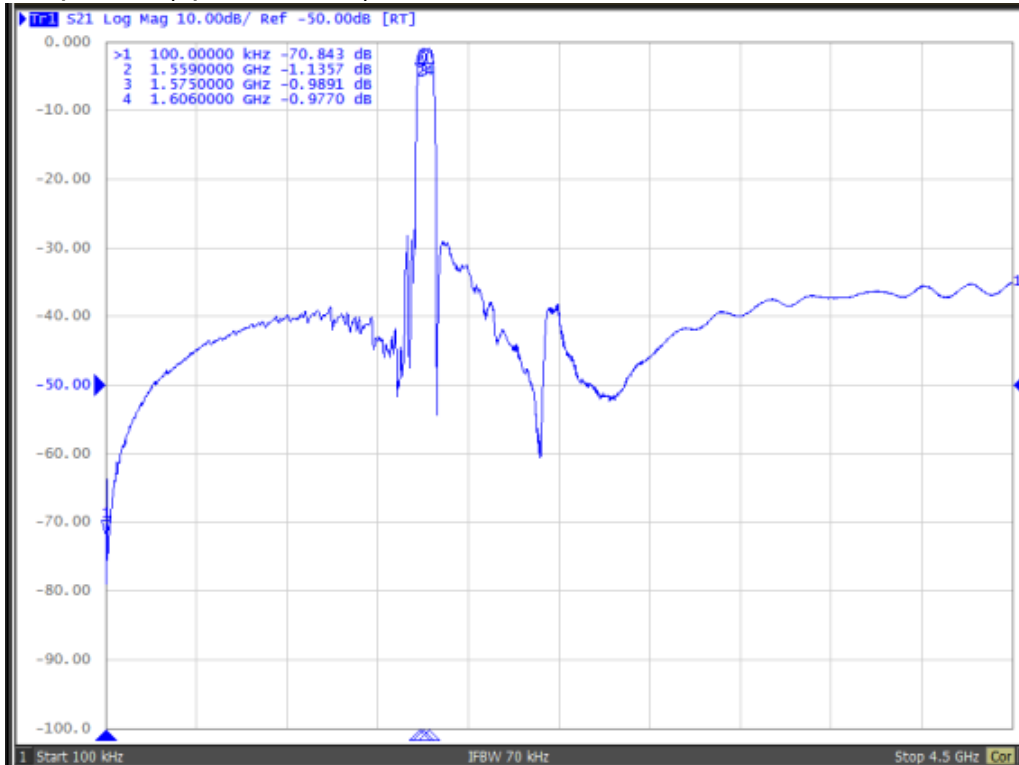
2. S21 response: (span 100MHz)



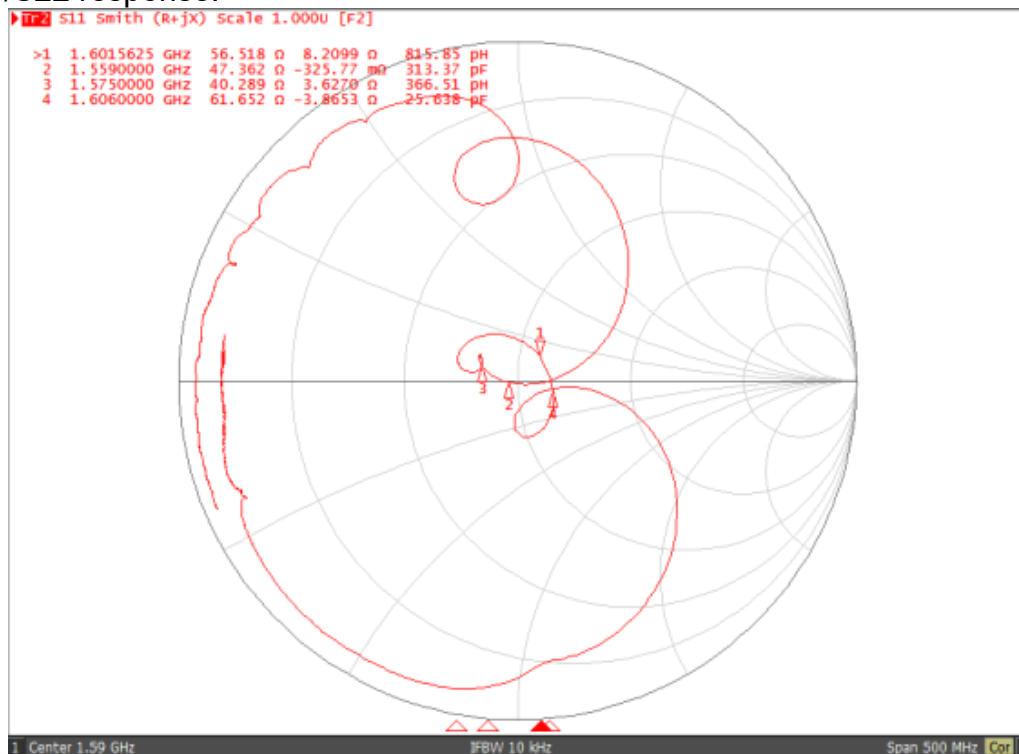
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3. S21 response: (span 4.5GHz)

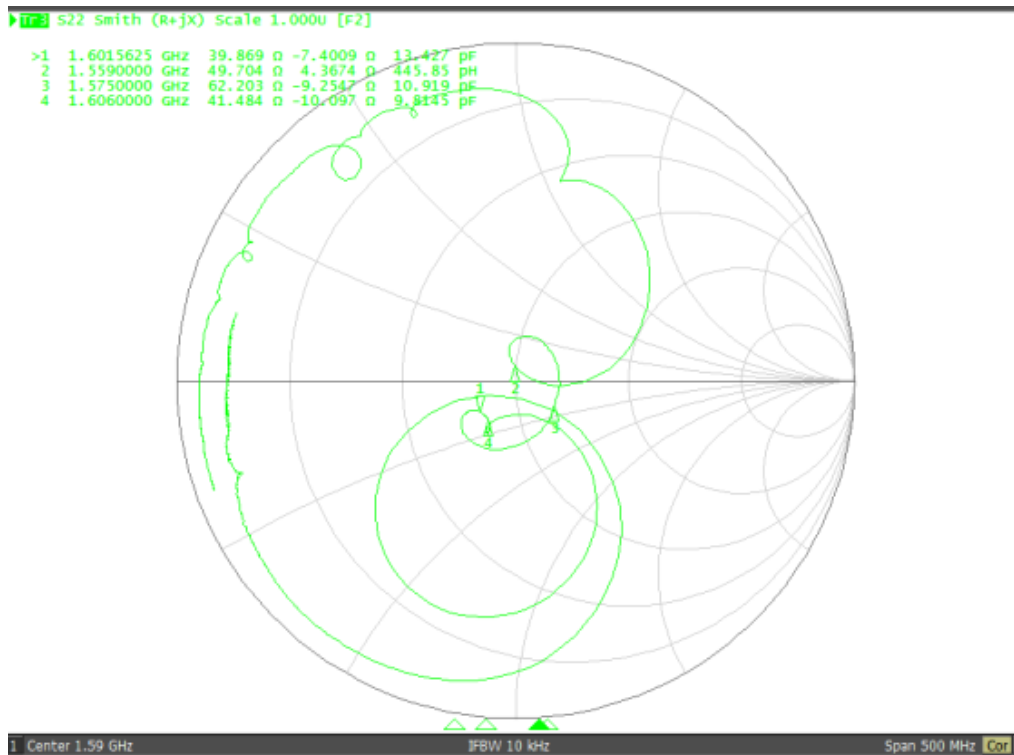


4. S11/S22 response:

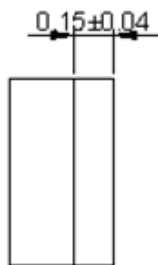
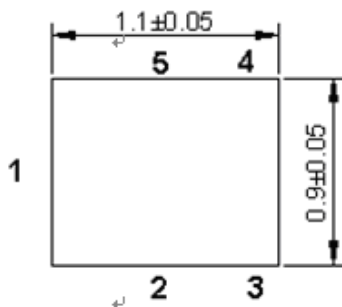


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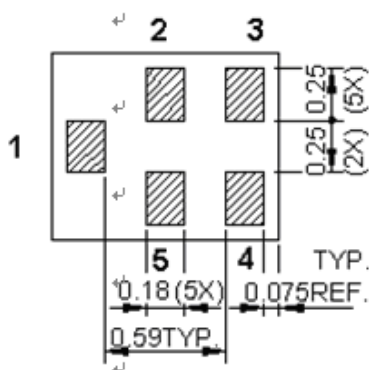
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**D. OUTLINE DRAWING:**



All tolerances are +/-0.05 mm unless otherwise specified  
 Coplanarity : 0.1 mm max.  
 1 to 5 : Pin No.  
 Unit : mm



Pin No.	Symbol	Function
1	IN	Input
2	GND	Ground
3	GND	Ground
4	OUT	Output
5	GND	Ground

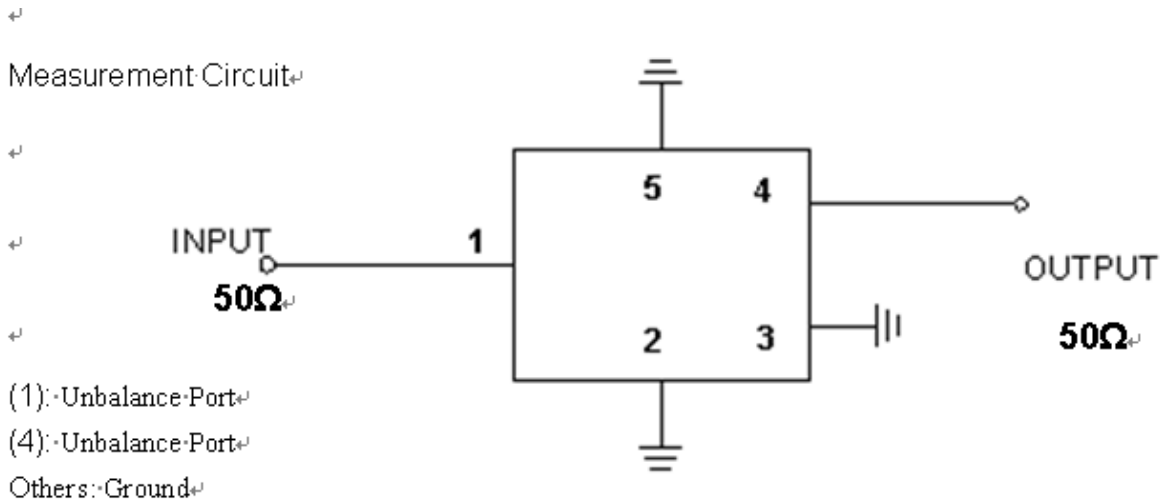
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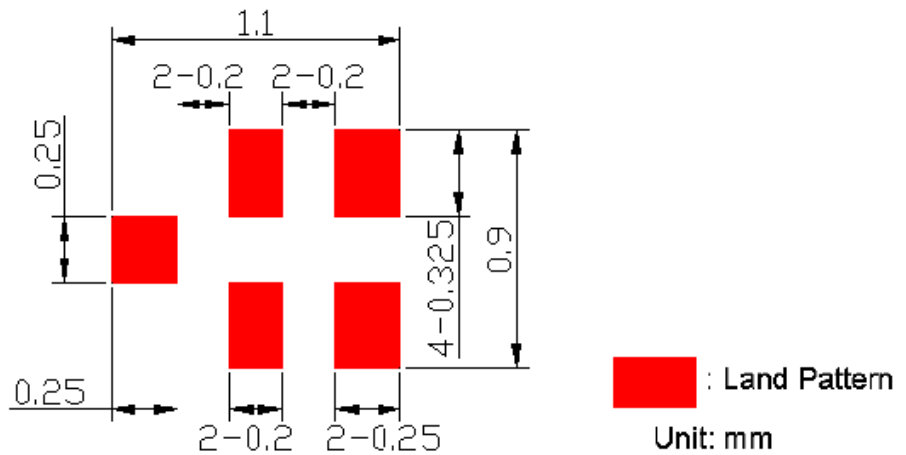
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**E. MEASUREMENT CIRCUIT:**



**F. PCB FOOTPRINT:**

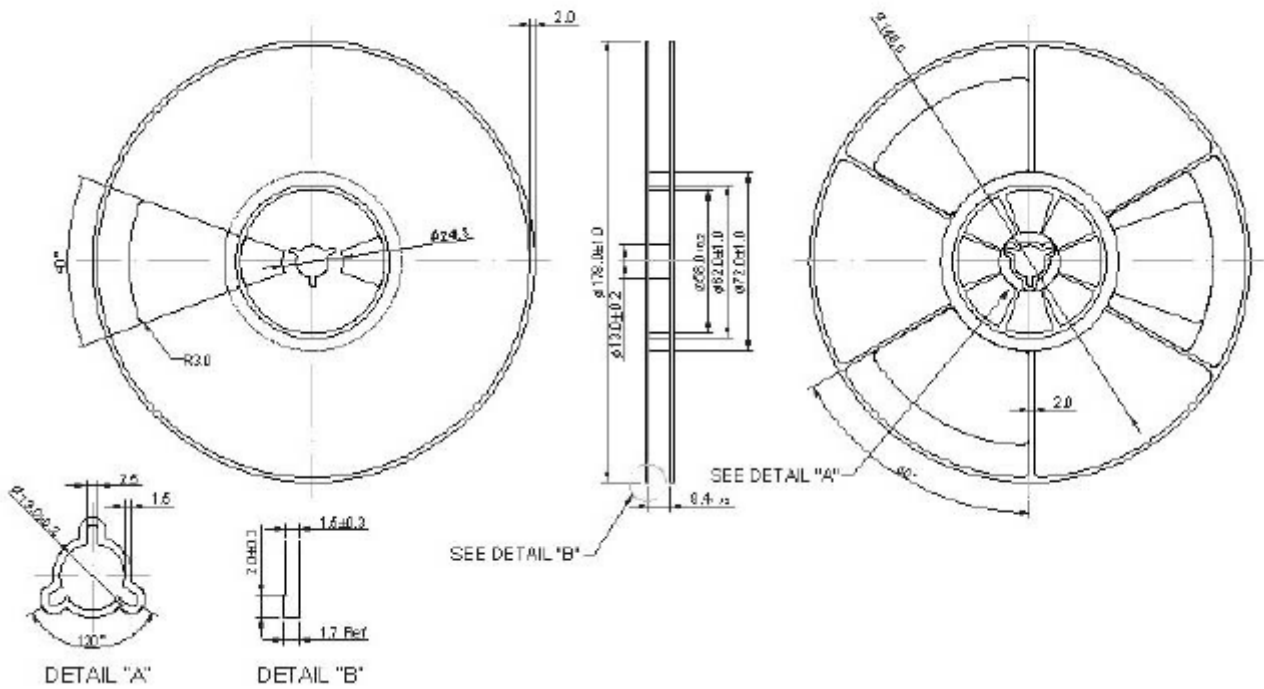


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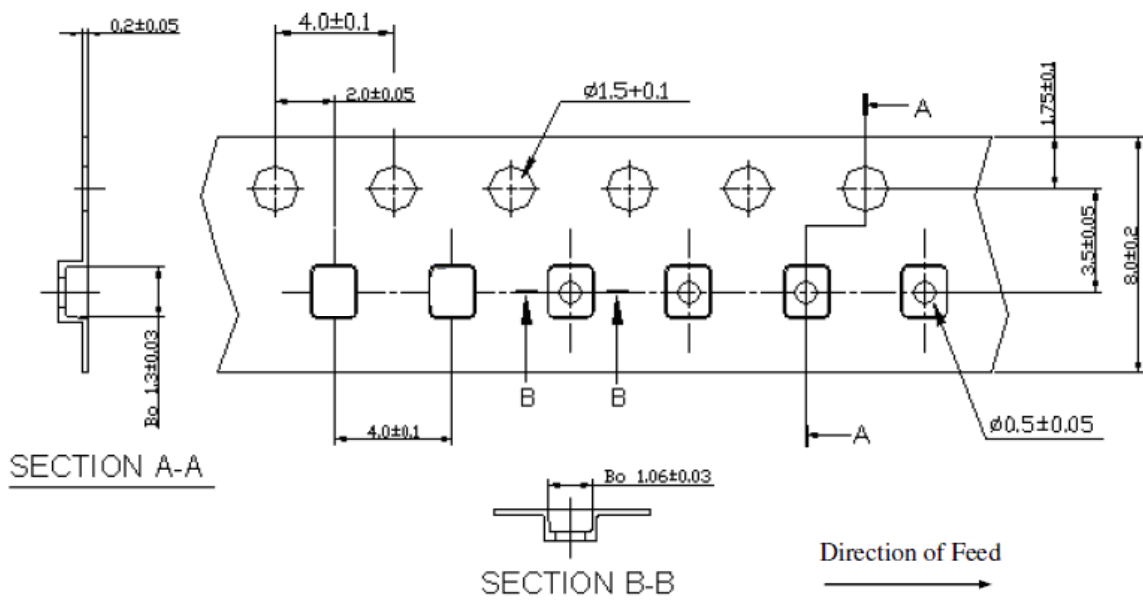
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**G. PACKING:**

1. Reel Dimensions



2. Tape Dimensions



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**H. RECOMMENDED REFLOW PROFILE:**

1. Preheating shall be fixed at 150 ~ 180°C for 60 ~ 90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50 ~ 80 seconds and at 260°C +0/-5°C peak (20 ~ 40 sec).
4. Time: 2 times.

