

# SAW Filter 1221.5 MHz CSP 1.1×0.9 mm

MODEL NO.: TA2600A

REV. No.:1.0

## A. MAXIMUM RATING:

1. Maximum Input Power: 15 dBm
2. DC voltage: 0 V
3. Operating Temperature: -40 °C to +85 °C
4. Storage Temperature: -40 °C to +85 °C
6. Moisture Sensitive Level: Level 3 (MSL3)

RoHS Compliant  
Lead-free soldering

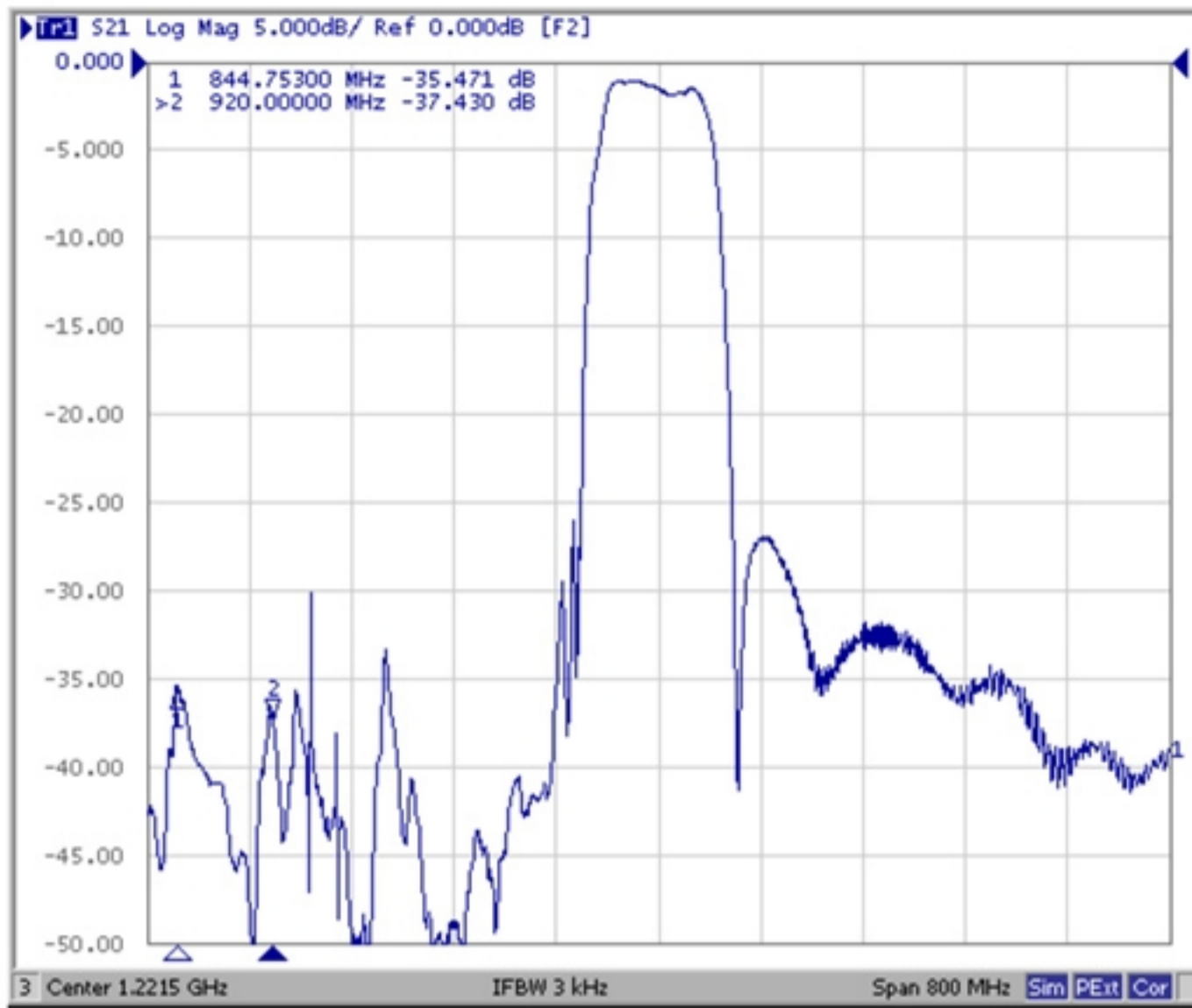
Electrostatic Sensitive Device (ESD)

## B. ELECTRICAL CHARACTERISTICS:

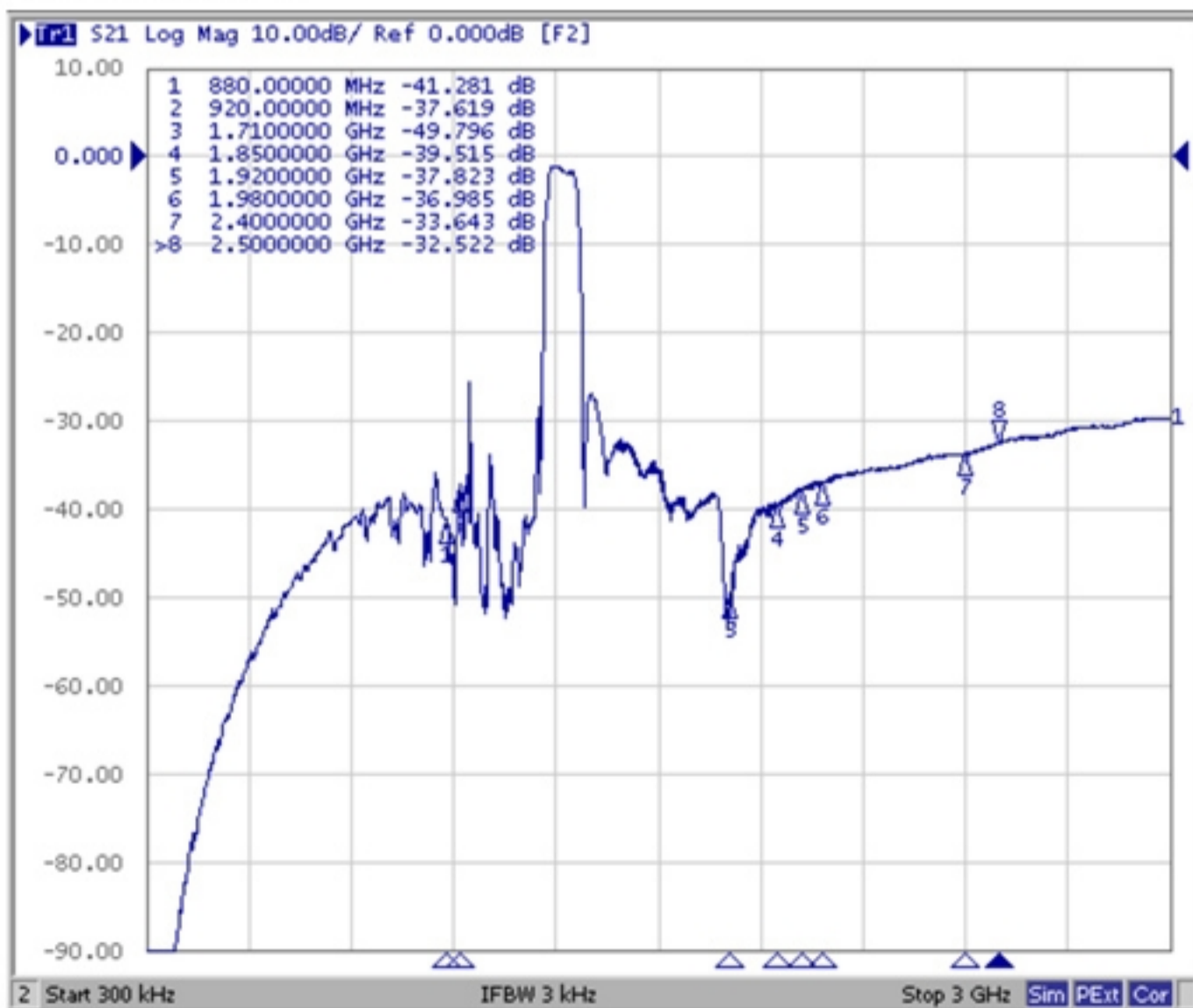
Item	Unit	Min.	Typ.	Max.
<b>Center frequency</b>	MHz	-	1221.5	-
<b>Insertion Loss</b> (1189 ~ 1254 MHz)				
At -40 °C to +85 °C	dB	-	1.8	2.6
At -40 °C to +105 °C	dB	-	1.8	2.8
<b>Group Delay Ripple</b> (Max-Min)				
1197 ~ 1217 MHz	ns	-	3	5
1217 ~ 1237 MHz	ns	-	1	5
1242 ~ 1249 MHz	ns	-	3.5	5
<b>Return Loss</b> (1197 ~ 1249 MHz)	dB	8	10	-
<b>Attenuation</b> (reference level from 0 dB)				
880 ~ 920 MHz	dB	30	35	-
1710 ~ 1850 MHz	dB	25	40	-
1850 ~ 1920 MHz	dB	25	38	-
1920 ~ 1980 MHz	dB	25	37	-
2400 ~ 2500 MHz	dB	25	32	-
<b>Temperature Coefficient of Frequency</b>	ppm/°C	-	-36	-

### C. Frequency Characteristics :

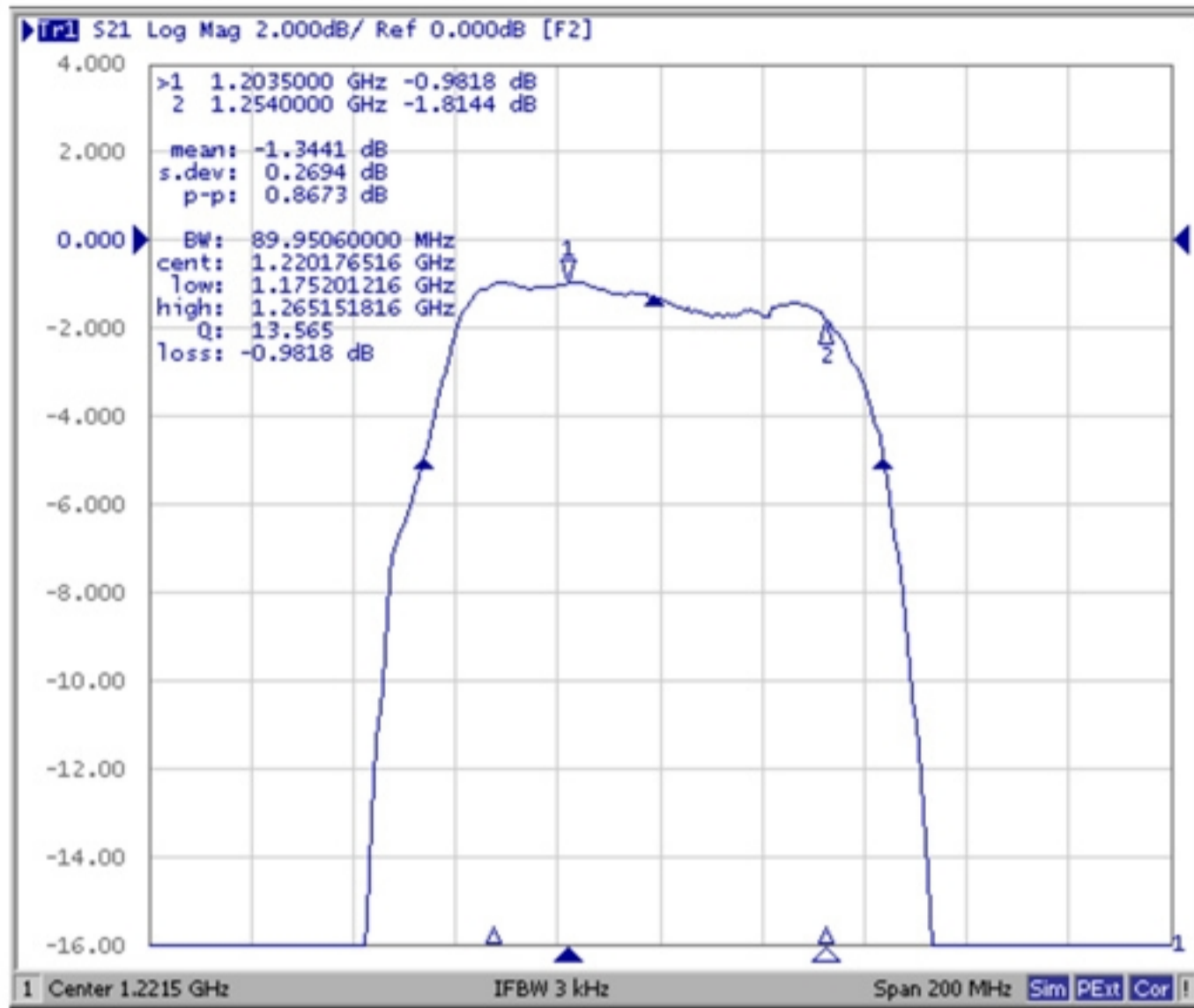
Span 800 MHz



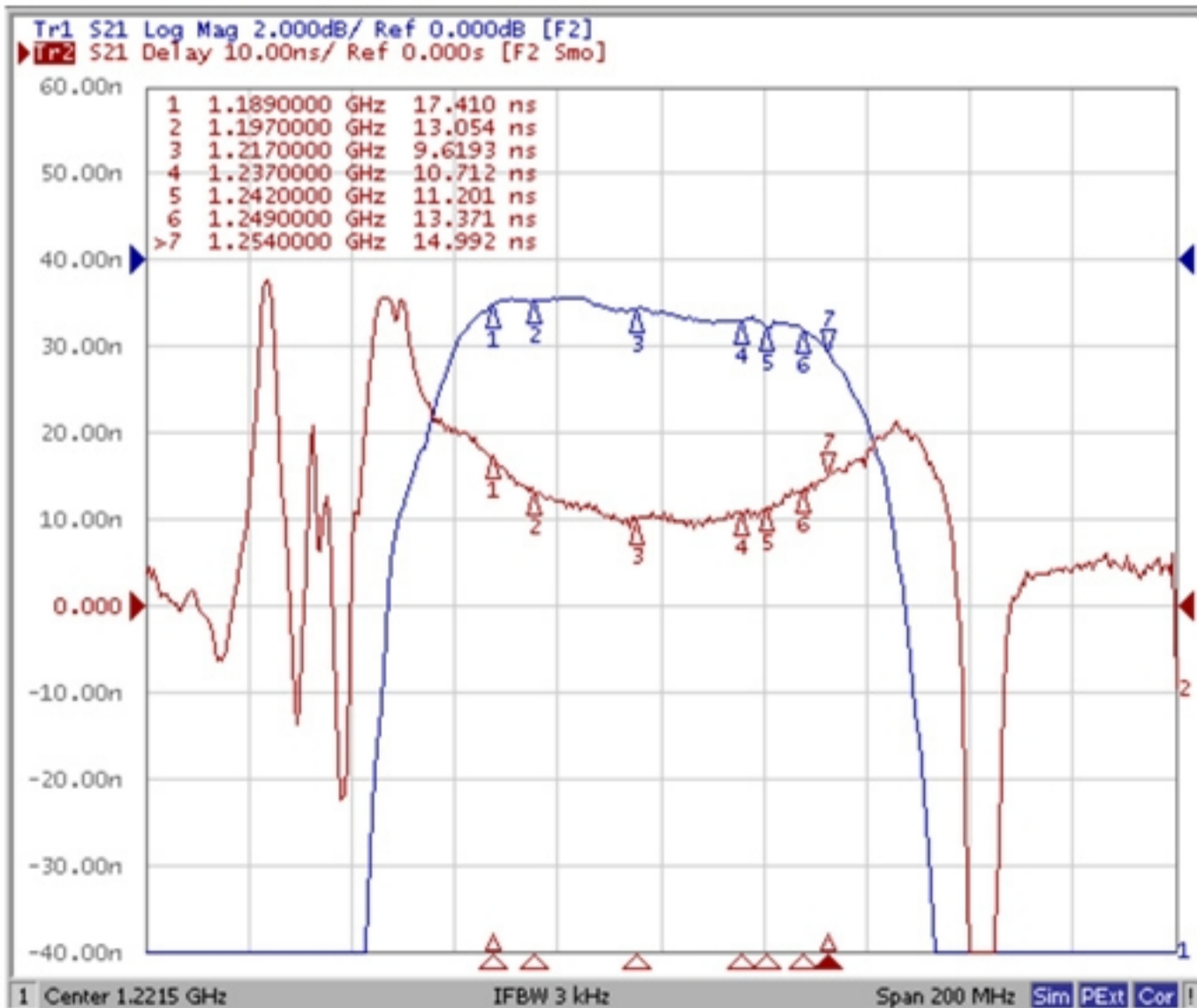
Span 3000 MHz



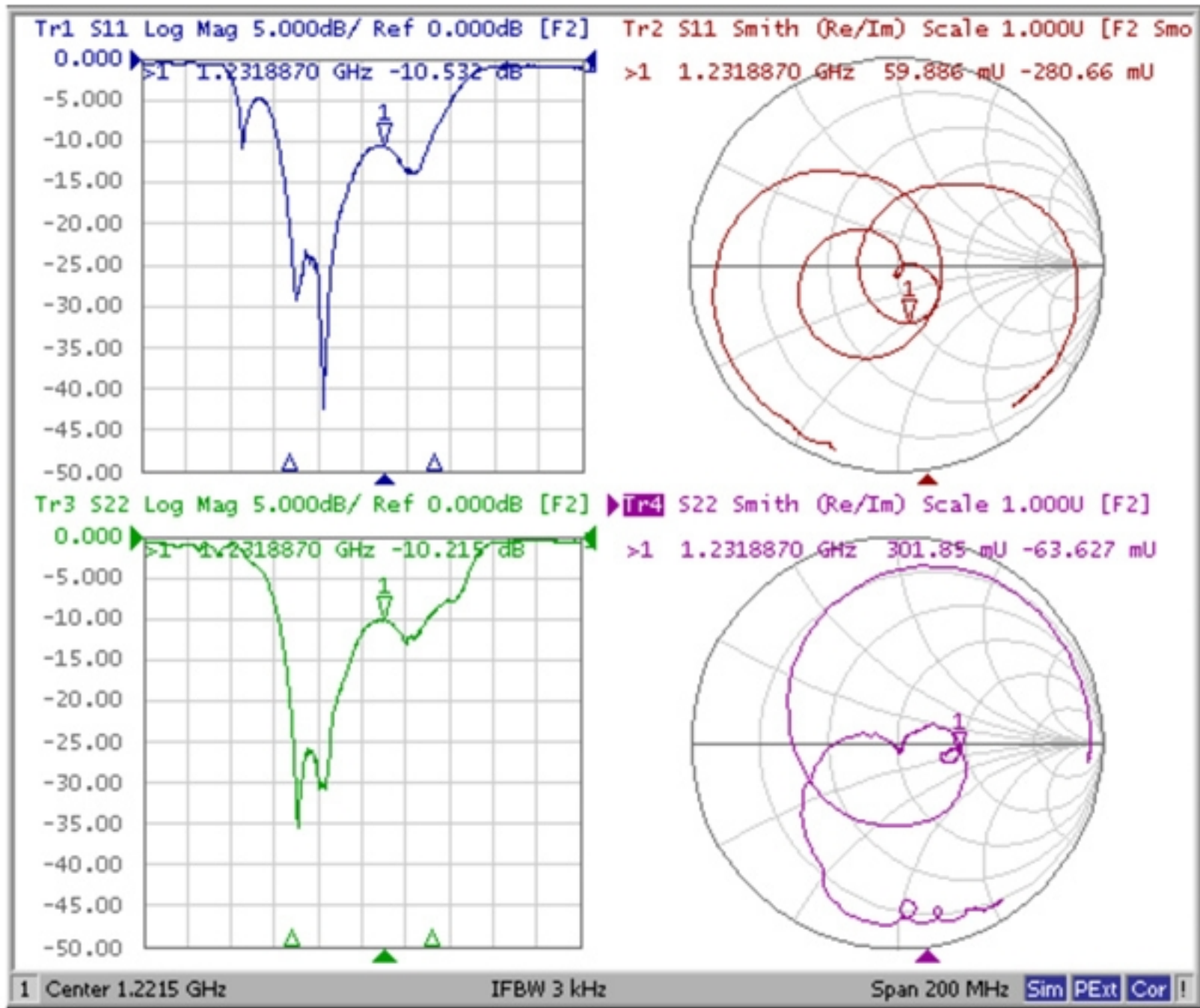
## Span 200 MHz



## Group Delay

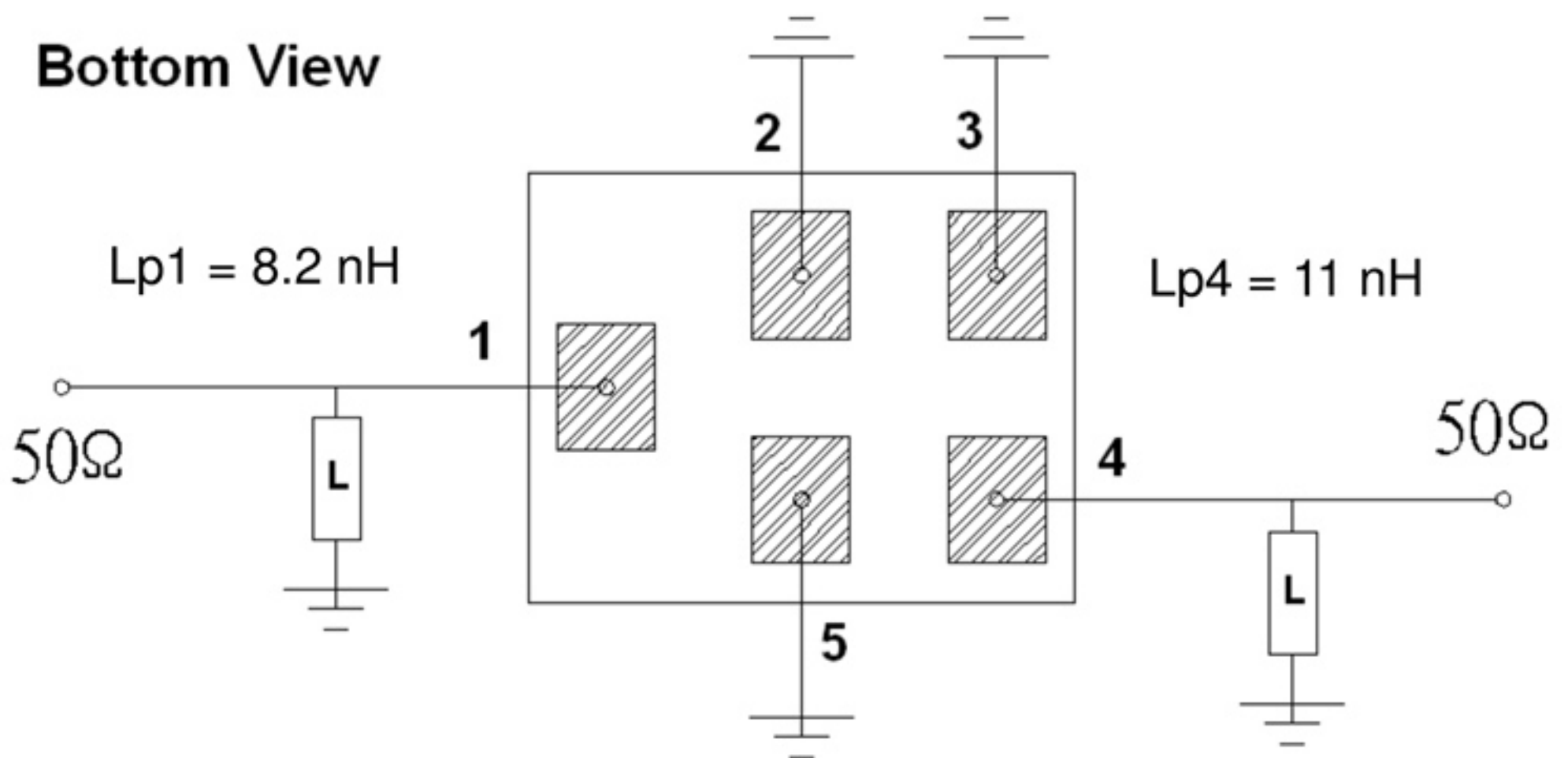


## Reflective Characteristic



## D. MEASUREMENT CIRCUIT:

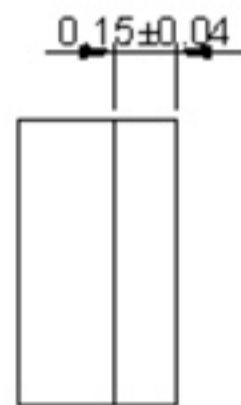
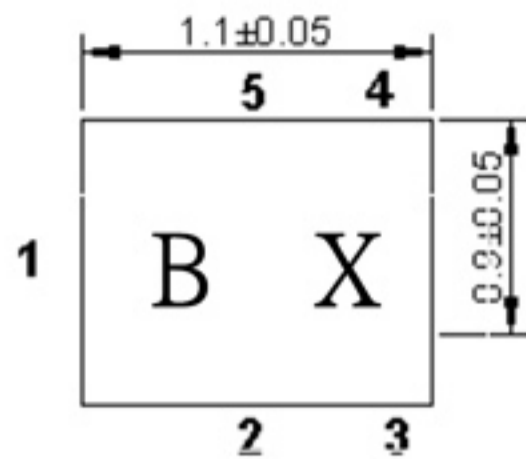
### Bottom View



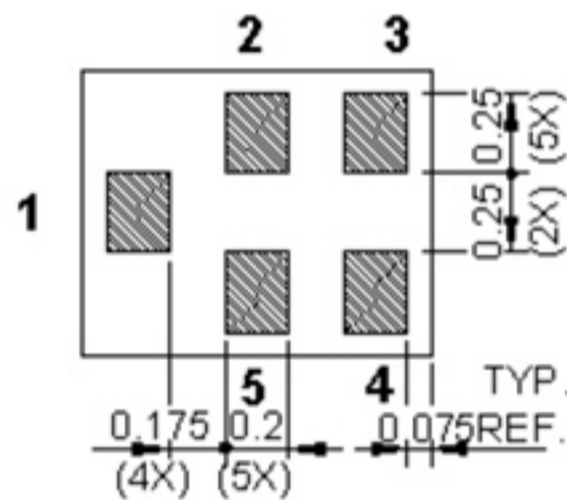
Source Impedance: 50 Ω

Load Impedance: 50 Ω

**E. OUTLINE DRAWING:**



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



Marking Descriptions	
$\bar{m}$	Series Number
X	Date Code(Year+Month)

Pin Description	
2, 3, 5	Ground
1	Input
4	Output

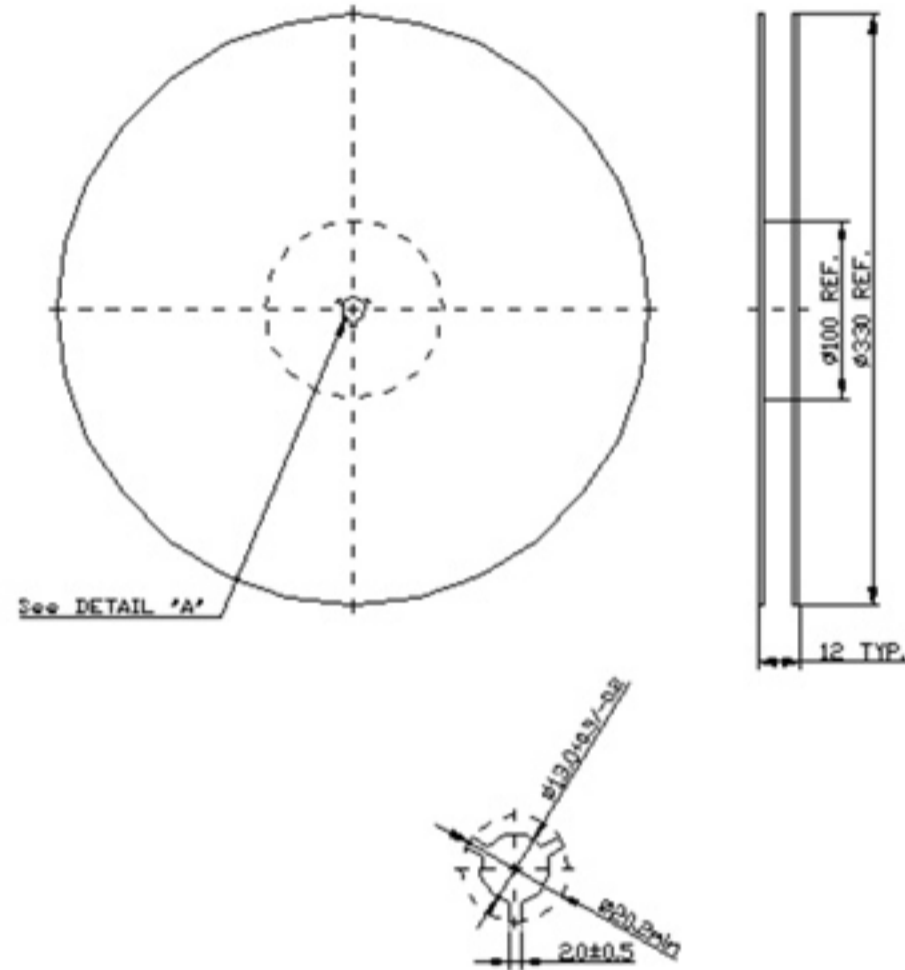
**Date Code ( year+month)**

Year	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2013	A	B	C	D	E	F	G	H	J	K	L	M
2014	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
2018	<u>N</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>T</u>	<u>U</u>	<u>V</u>	<u>W</u>	<u>X</u>	<u>Y</u>	<u>Z</u>
2019	<u>a</u>	<u>b</u>	<u>c</u>	<u>d</u>	<u>e</u>	<u>f</u>	<u>g</u>	<u>h</u>	<u>i</u>	<u>k</u>	<u>l</u>	<u>m</u>
2020	<u>n</u>	<u>p</u>	<u>q</u>	<u>r</u>	<u>s</u>	<u>t</u>	<u>u</u>	<u>v</u>	<u>w</u>	<u>x</u>	<u>y</u>	<u>z</u>

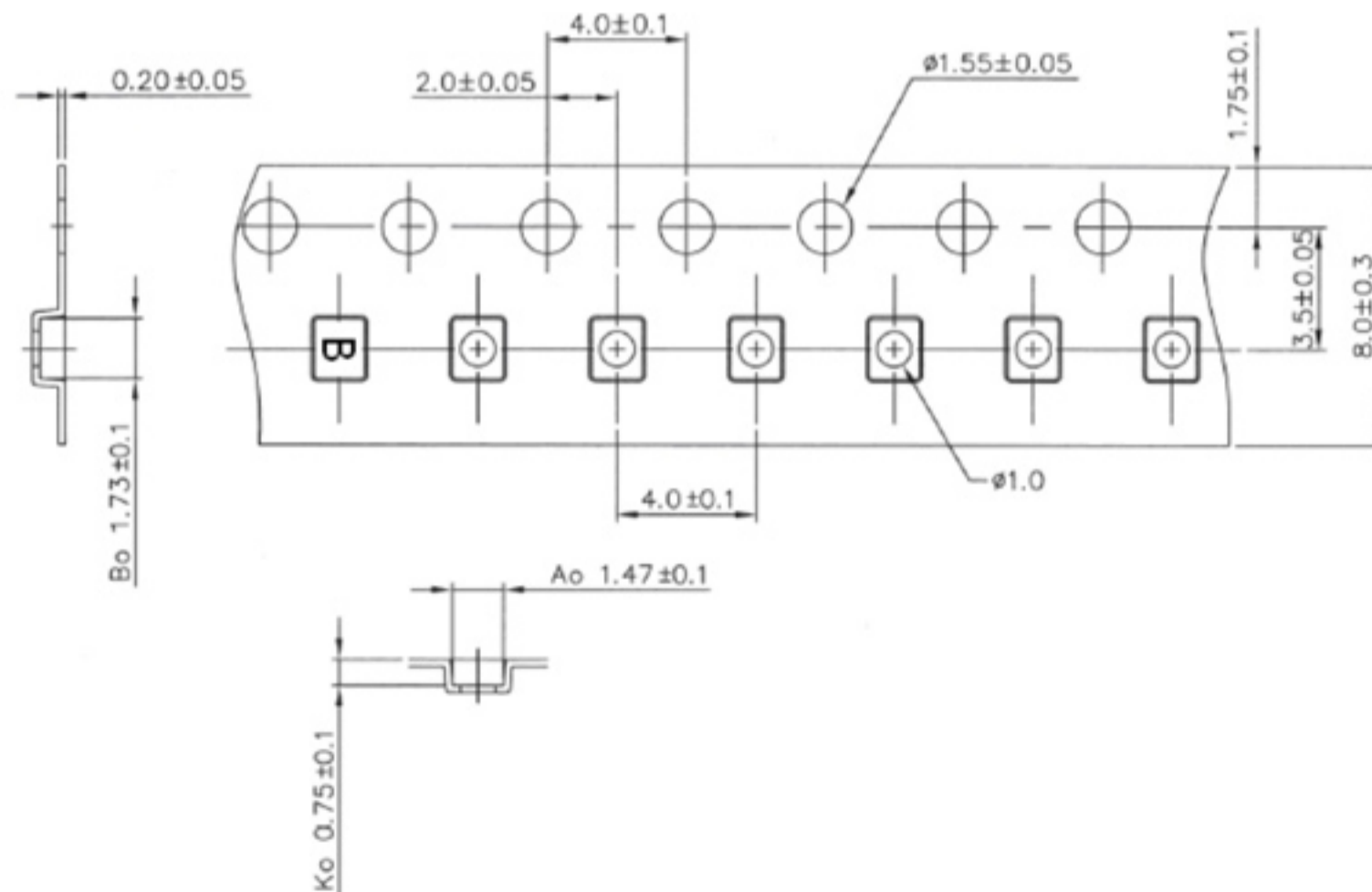
## F. PACKING:

### 1. REEL DIMENSION

(Please refer to FR-75D10 for packing quantity)



### 2. TAPE DIMENSION



### G. RECOMMENDED REFLOW PROFILE :

1. Preheating shall be fixed at  $150\sim 180^{\circ}\text{C}$  for  $60\sim 90$  seconds.
2. Ascending time to preheating temperature  $150^{\circ}\text{C}$  shall be 30 seconds min.
3. Heating shall be fixed at  $220^{\circ}\text{C}$  for  $50\sim 80$  seconds and at  $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$  peak ( $20\sim 40\text{sec}$ ).
4. Time: 2 times.

