SAW Filter 1583MHz

MODEL NO.:TA1343A REV. NO.:5.0

RoHS Compliant

Lead-free soldering

A. MAXIMUM RATING:

1. Input Power Level: 13 dBm
2. DC Voltage : 5Vmax
3. Operating Temperature: -40℃ to +85℃
4. Storage Temperature: -40℃ to +105℃
5. Moisture Sensitivity Level: Level 3(MSL3)
6. ESD : 50V(MM) 100V(HBM)

B. ELECTRICAL CHARACTERISTICS:

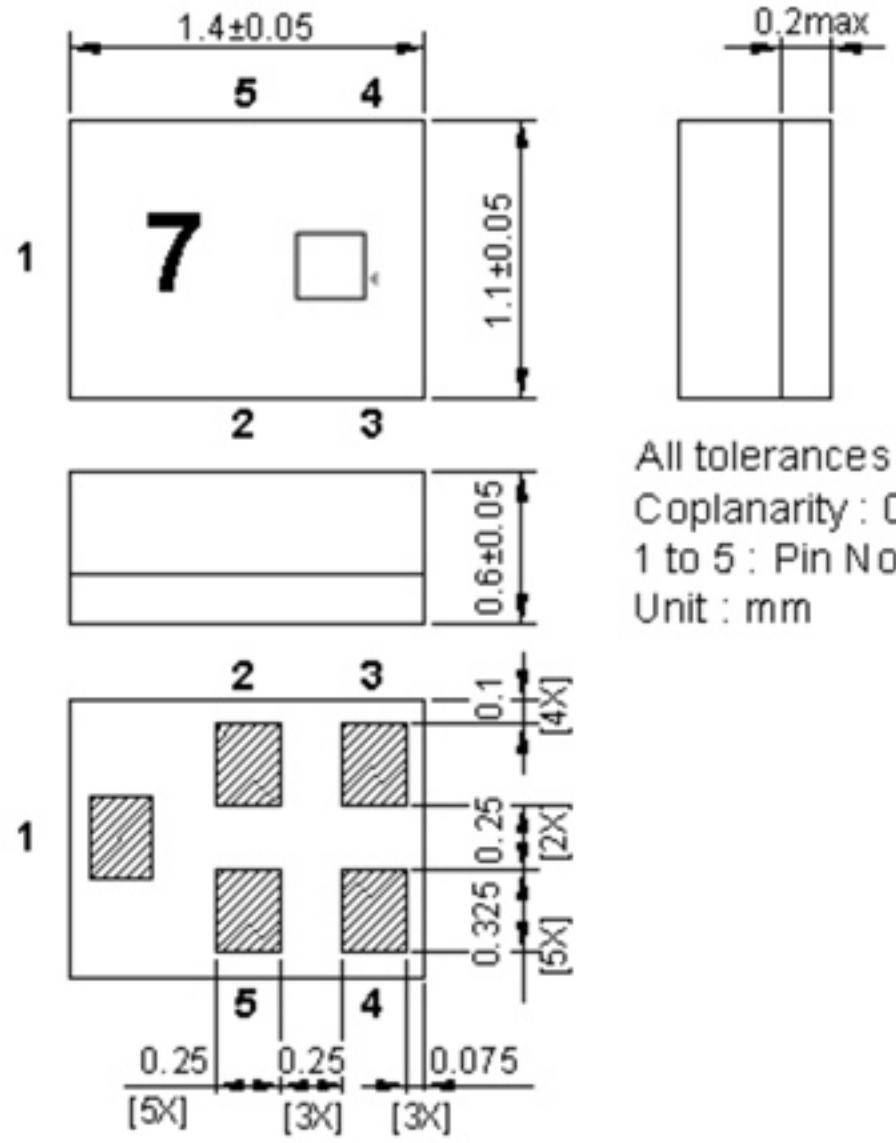
Terminating source impedance (single) : $Z_S = 50\ \Omega$

Terminating load impedance(single) : $Z_L = 50\ \Omega$

Item	Unit	Min	Type.	Max
Center Frequency **Fc**	MHz	-	1583	-
Insertion Loss (1559.1~1563.1 MHz) **IL**	dB		1.9	2.1
Insertion Loss (1573.42~1577.42 MHz) **IL**	dB		1.3	1.5
Insertion Loss (1597.55~1605.89 MHz) **IL**	dB		1.6	2.1
VSWR (1559.1~1563.1 MHz)			1.5	1.8
VSWR (1573.42~1577.42 MHz)			1.7	1.9
VSWR (1597.55~1605.89 MHz)			1.7	1.9
Amplitude ripple (1559.1~1563.1 MHz)	dB		0.6	0.8
(1573.42~1577.42 MHz)	dB		0.3	0.5
(1597.55~1605.89 MHz)	dB		0.5	0.6
Attenuation				
10 ~ 824 MHz	dB	23	26	
824 ~ 925 MHz	dB	23	26	
1427 ~ 1463 MHz	dB	26	31	
1710 ~ 1785 MHz	dB	25	30	
1850 ~ 1980 MHz	dB	26	30	
2400 ~ 2570 MHz	dB	30	33	
2570 ~ 3000 MHz	dB	30	35	

Package size	mm	SMD 1.4x1.1

C.OUTLINE DRAWING:



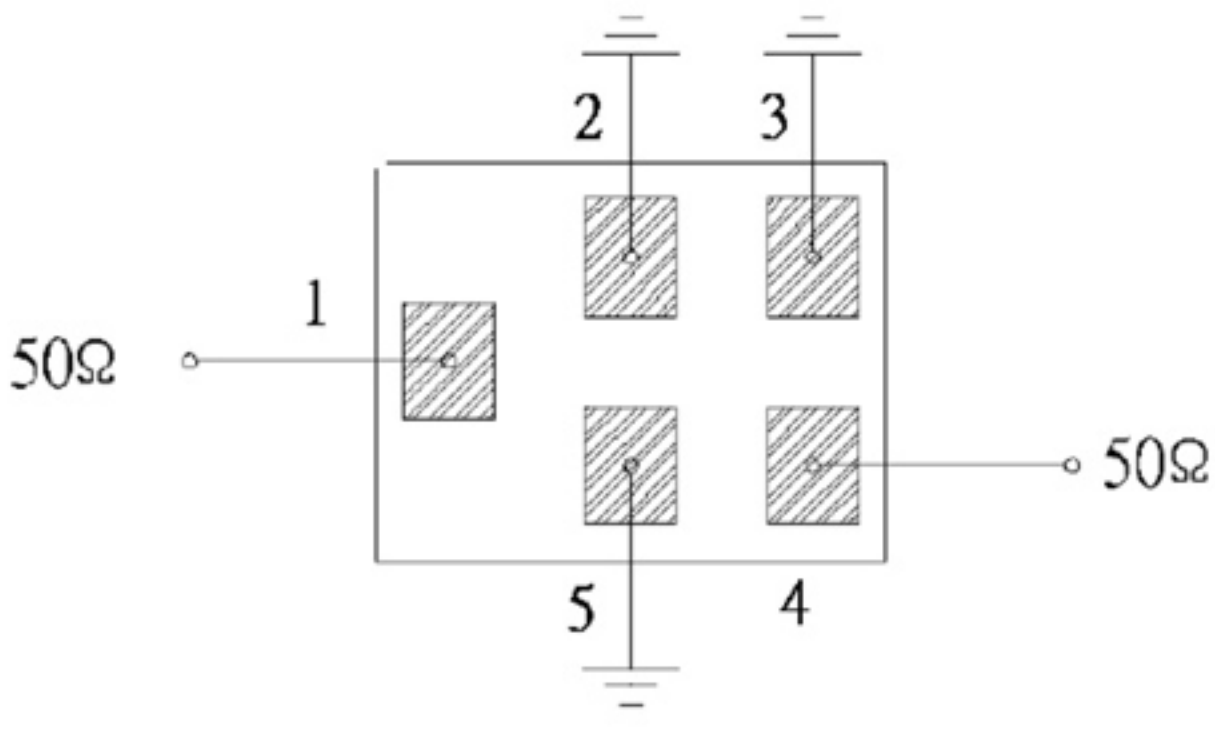
All tolerances are +/-0.05 mm unless otherwise specified
Coplanarity : 0.1 mm max.
1 to 5 : Pin No.
Unit : mm

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

□ : Year/Month Code (Follow the table)

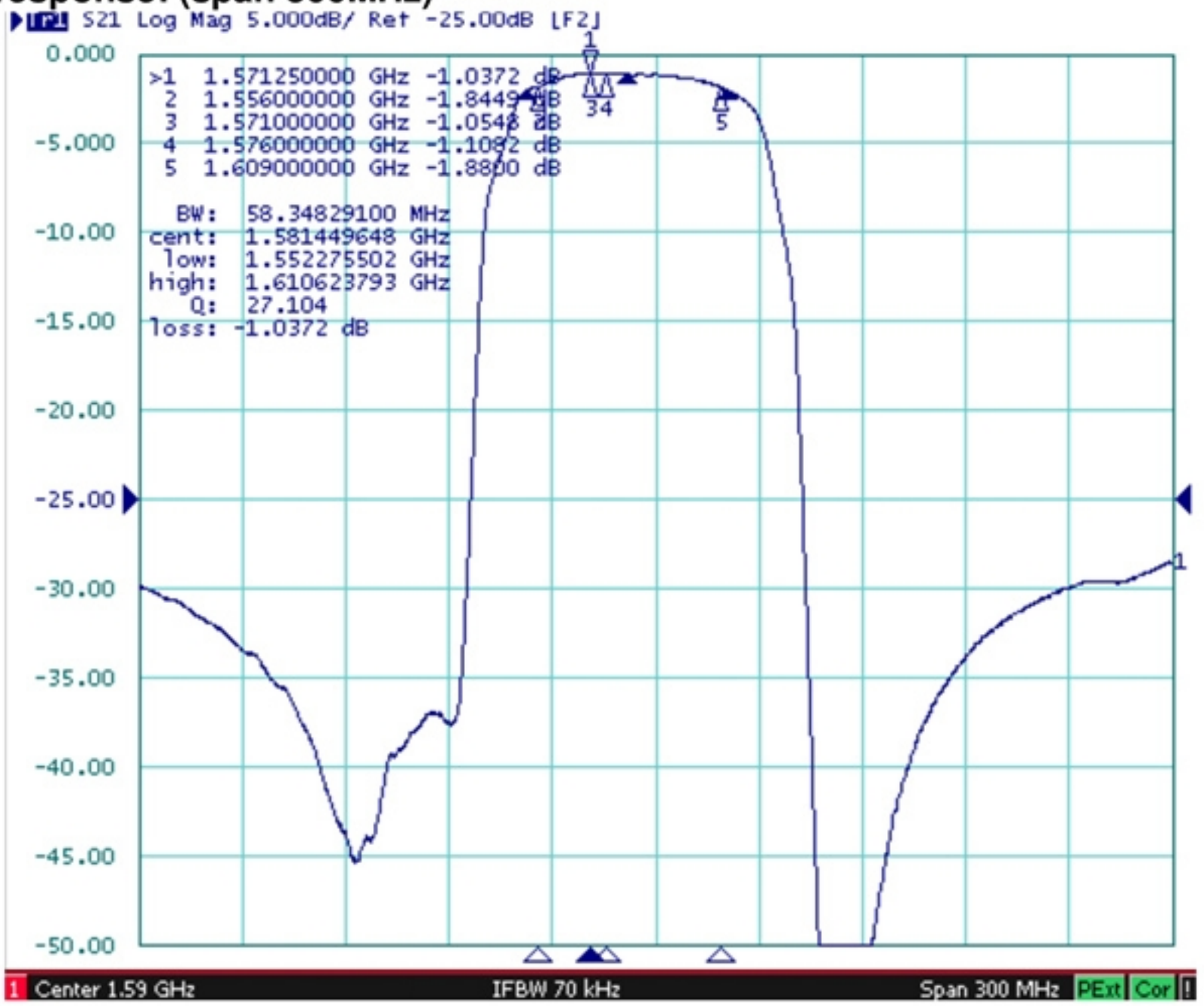
YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**J**	**K**	**L**	**M**
2014	**N**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**W**	**X**	**Y**	**Z**
2015	**a**	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**j**	**k**	**l**	**m**
2016	**n**	**p**	**q**	**r**	**s**	**t**	**u**	**v**	**w**	**x**	**y**	**z**
2017	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**J**	**K**	**L**	**M**
2018	**N**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**W**	**X**	**Y**	**Z**
2019	**a**	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**j**	**k**	**l**	**m**
2020	**n**	**p**	**q**	**r**	**s**	**t**	**u**	**v**	**w**	**x**	**y**	**z**

D. MEASUREMENT CIRCUIT:

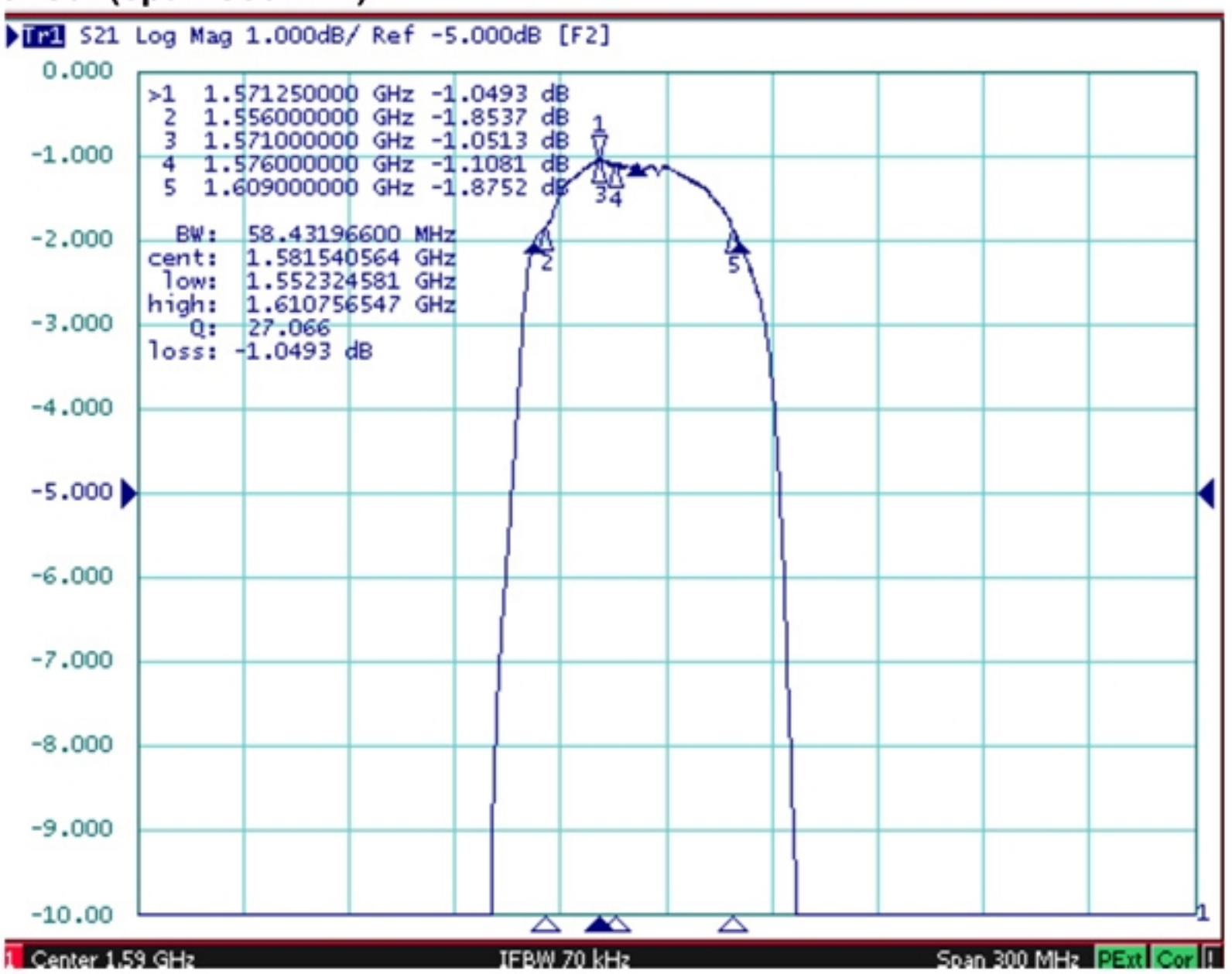


E. Frequency Characteristics:

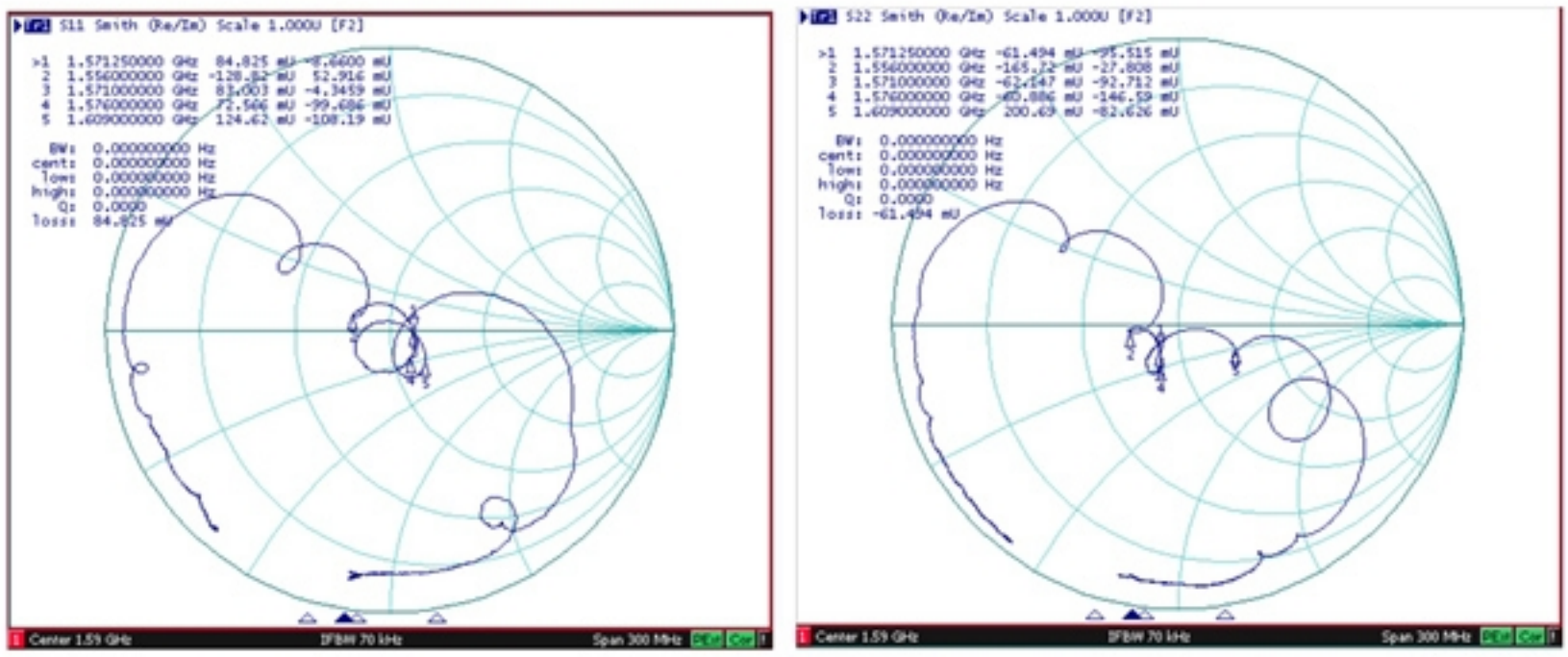
S21 response: (span 300MHz)



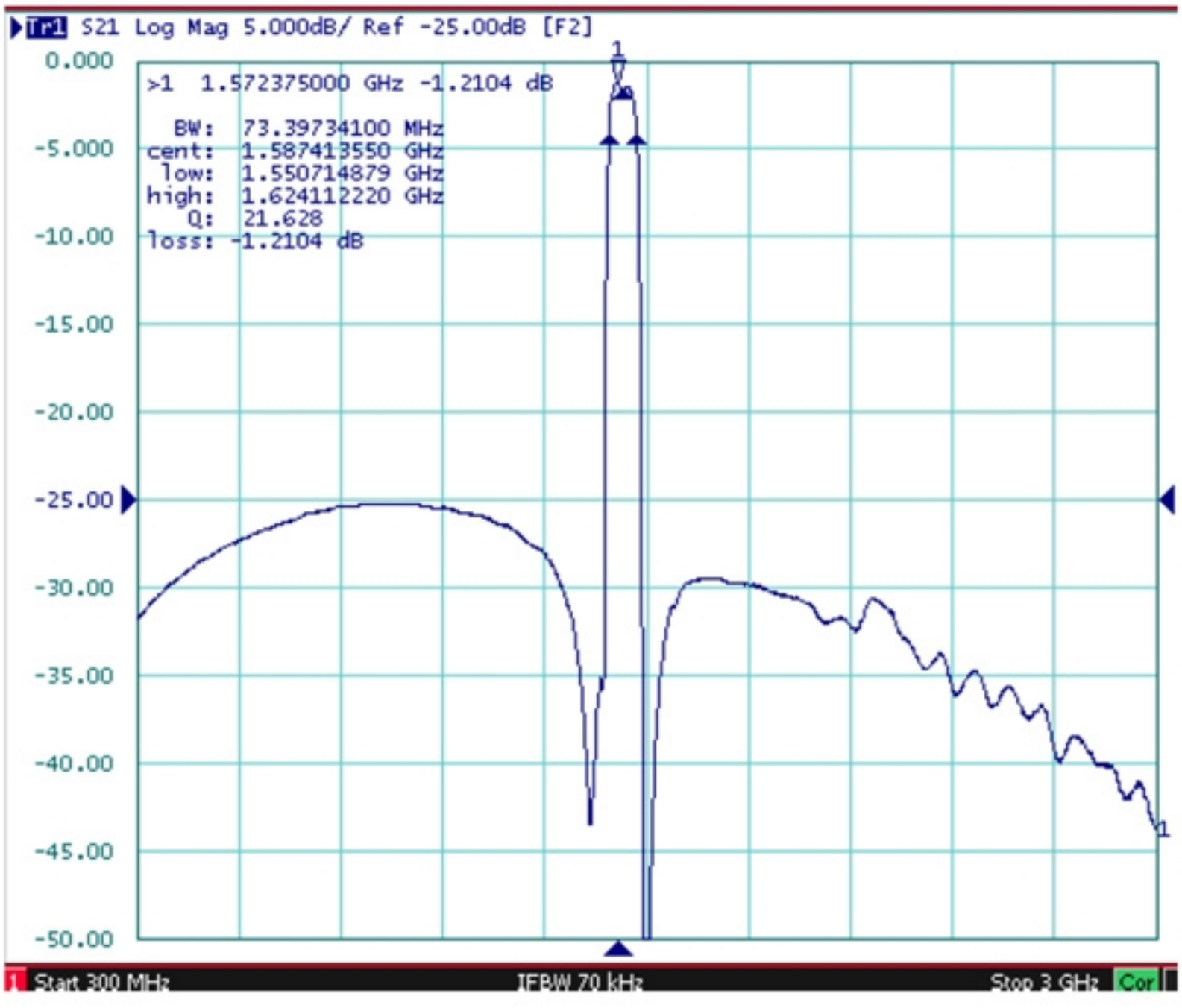
S21 response: (span 300MHz)



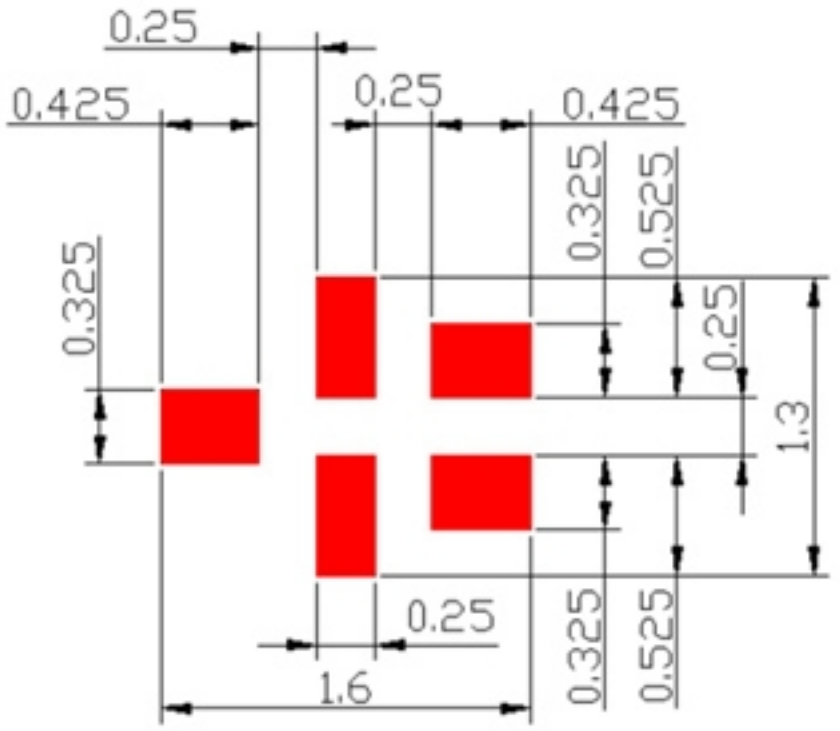
S11/S22 response：



S21 response: (span 3GHz)



F. PCB Footprint:

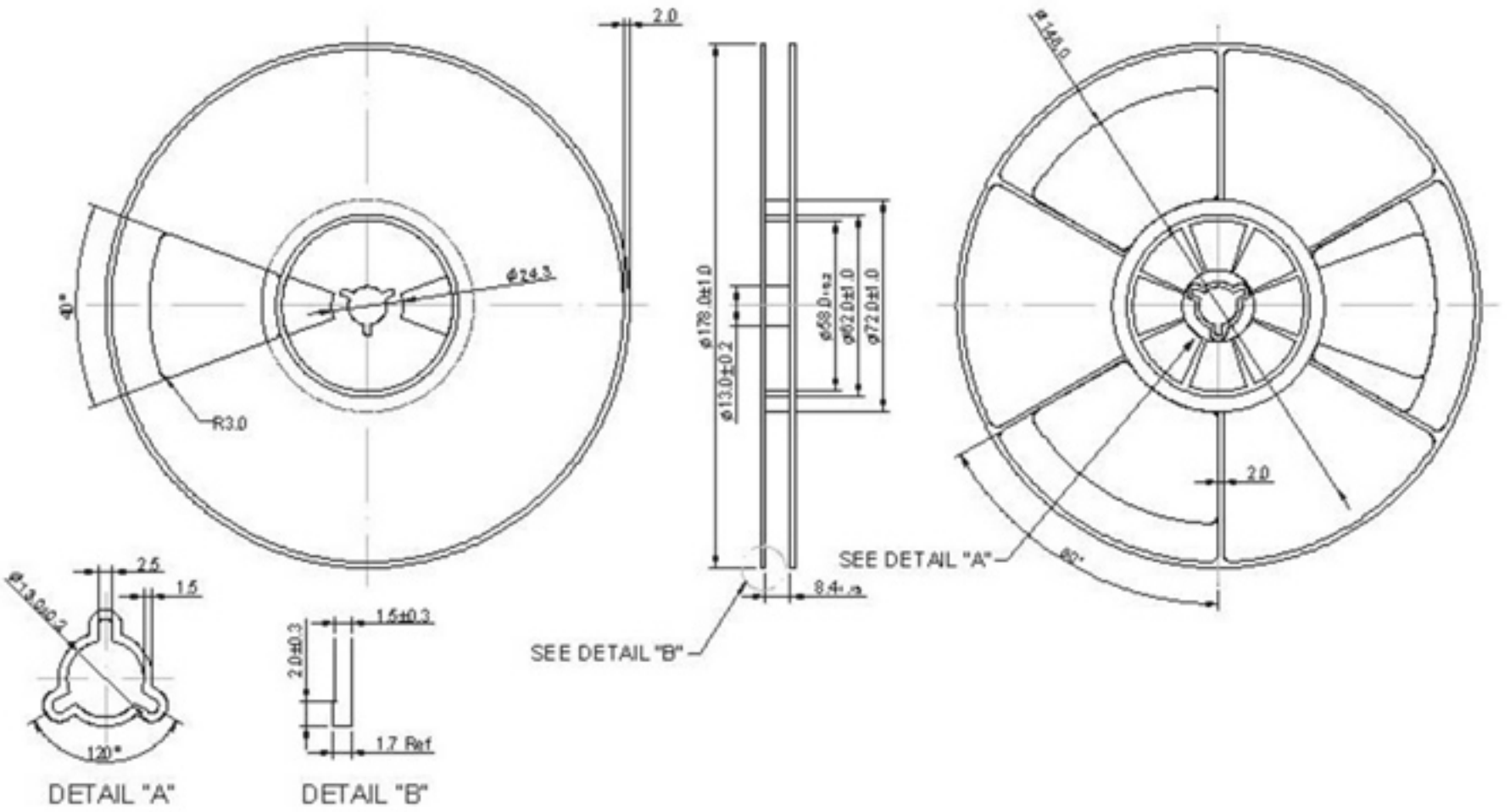


: Land Pattern

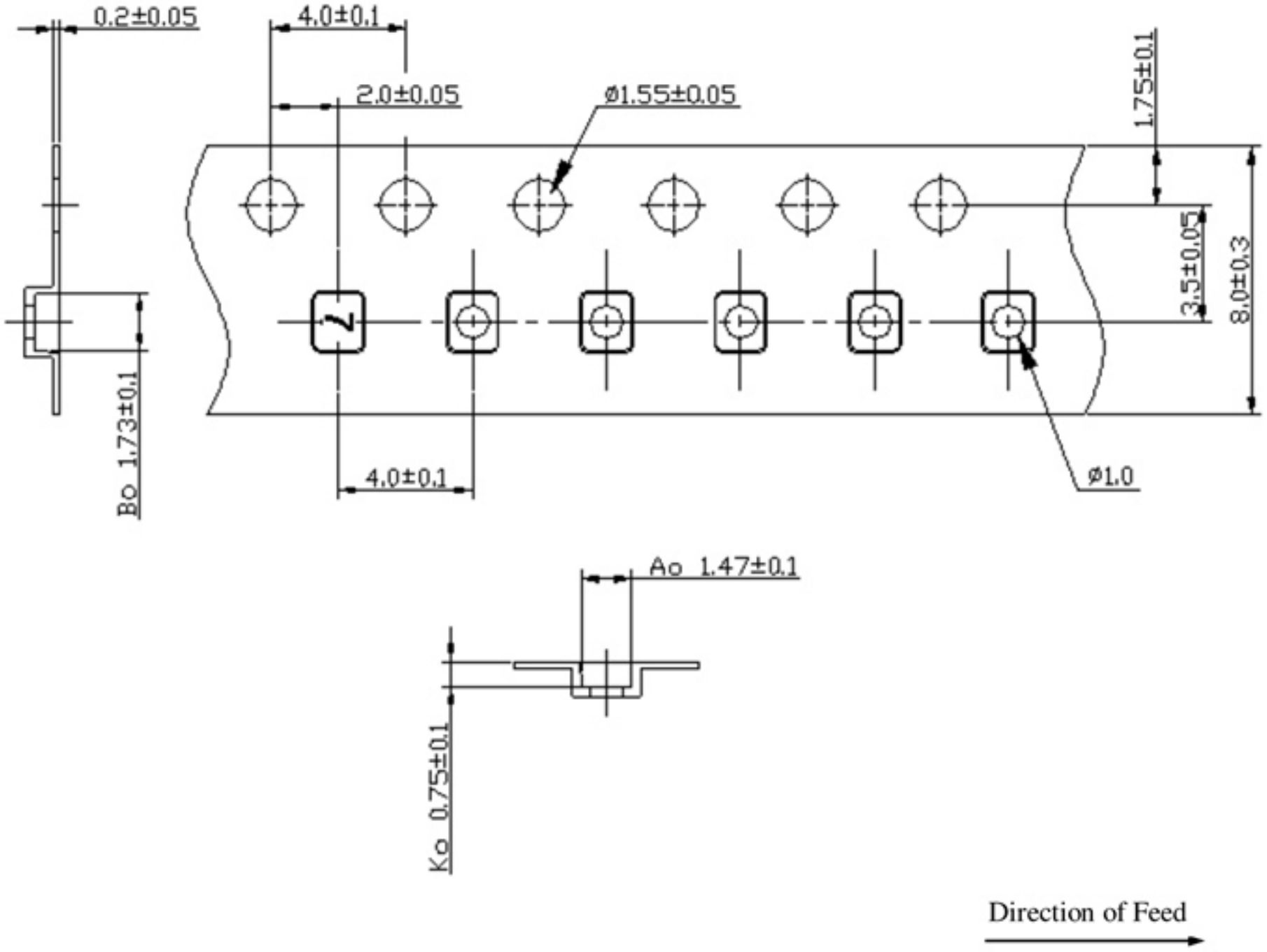
G. PACKING:

1. REEL DIMENSION

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



2. TAPE DIMENSION



H. <u>RECOMMENDED REFLOW PROFILE</u> :

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