SAW Filter 315MHz

MODEL NO.:TA1794A REV. NO.:3.0

A. MAXIMUM RATING:

1. Input Power Level: 13 dBm
2. DC Voltage : 0V
3. Operating Temperature: -40℃ to +105℃
4. Storage Temperature: -40℃ to +105℃
5. Moisture Sensitive Level (MSL): Level 1

RoHS Compliant

Lead-free soldering

Electrostatic **S**ensitive **D**evice (**ESD**)

B. ELECTRICAL CHARACTERISTICS:

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

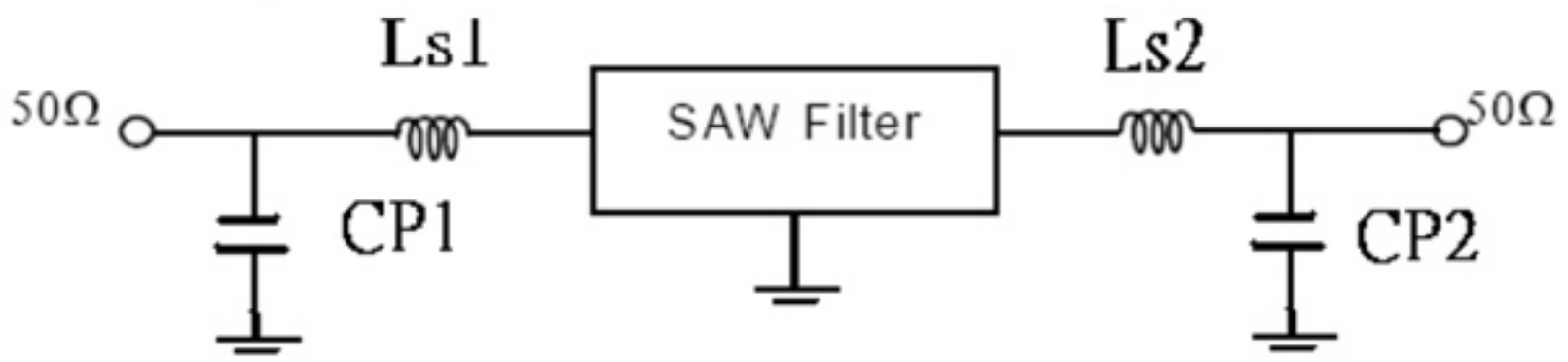
Terminating load impedance(single) : $Z_L = 50\ \Omega$

Item	Unit	Min	Type.	Max
Center Frequency Fc	MHz	-	315	-
Minimum Insertion Loss α_{min} (@315MHz)				
Incl. Loss in matching elements (314.615 ~ 315.385 MHz)	dB		2.0	3.0
Excl. Loss in matching elements (314.615 ~ 315.385 MHz)	dB		1.1	1.9
Pass Band (Relative to α_{min})				
314.615 ~ 315.385 MHz			2.0	2.5
314.52 ~ 315.48 MHz			2.5	3.0
Relative Attenuation (Relative to α_{min}) α_{rel}				
10 ~ 140 MHz	dB	66	71	
140 ~ 235 MHz	dB	57	62	
235 ~ 300 MHz	dB	44	49	
300 ~ 310 MHz	dB	23	34	
310 ~ 313 MHz	dB	9	14	
317 ~ 320 MHz	dB	9	14	
320 ~ 325 MHz	dB	15	20	
325 ~ 332 MHz	dB	27	32	
332 ~ 352 MHz	dB	36	41	
352 ~ 390 MHz	dB	47	52	
390 ~ 1600 MHz	dB	55	60	
1600 ~ 2500 MHz	dB	50	55	

Package size	mm	SMD 3x3		
Impedance for pass band matching3)				
Input: Z_{IN} = Ls1/Cp1	nH		133/8.2	
Output: Z_{OUT} = Ls2/Cp2	nH		120/8.2	

C.. TEST CIRCUIT:

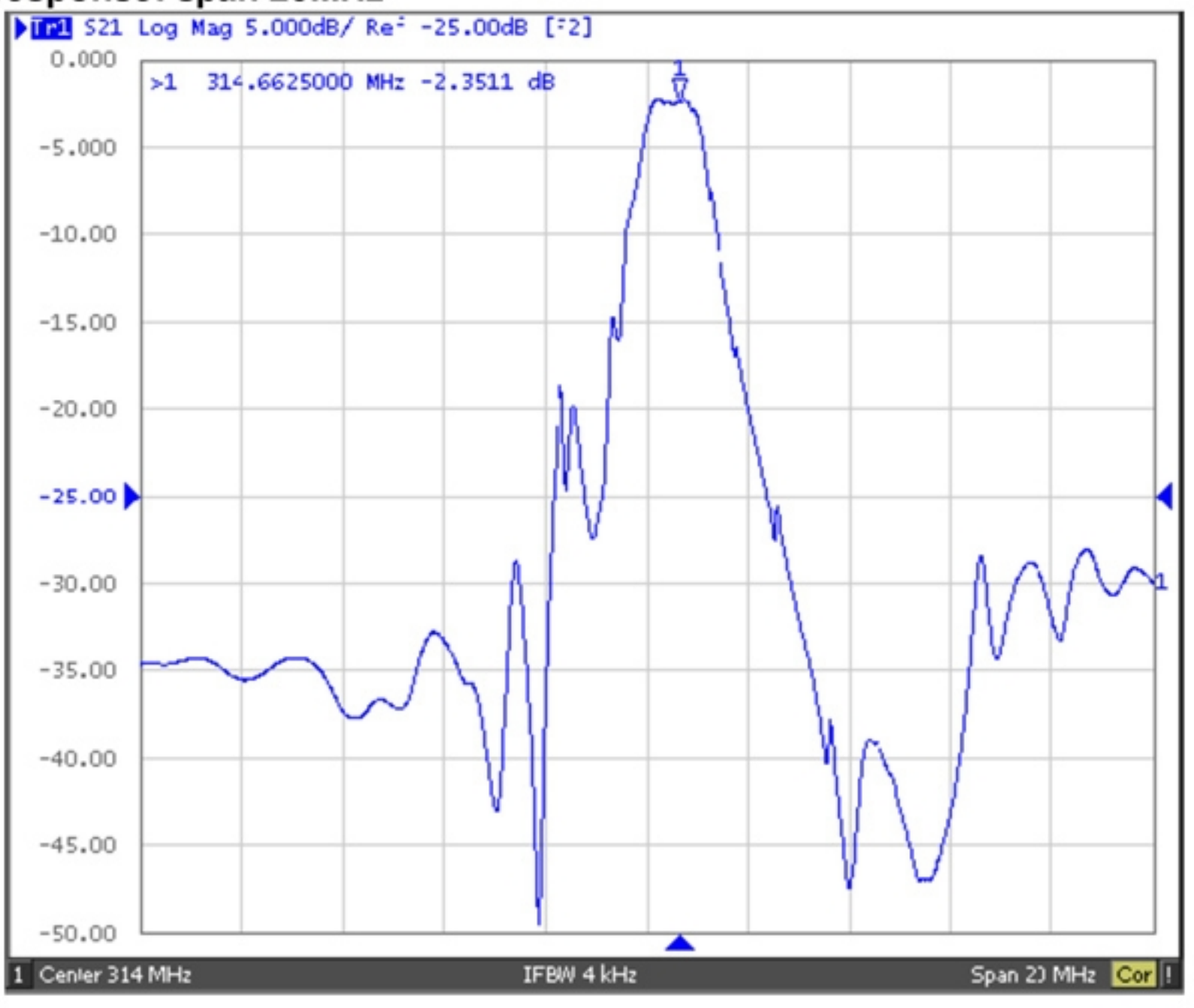
The matching circuit is



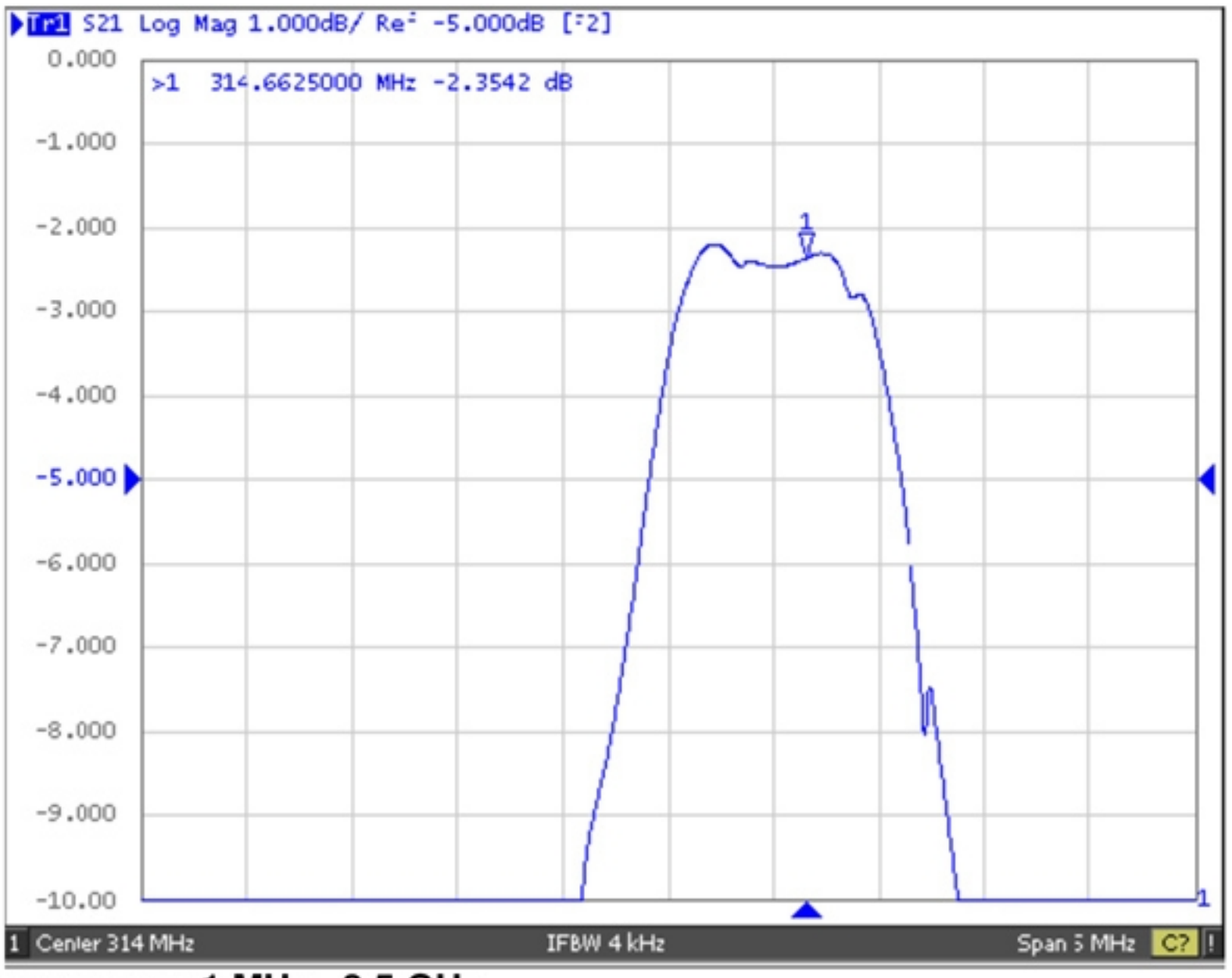
Ls1=120nH + 13nH ; Ls2=120nH;Cp1=8.2pF ; Cp2=8.2pF

D. Frequency Characteristics:

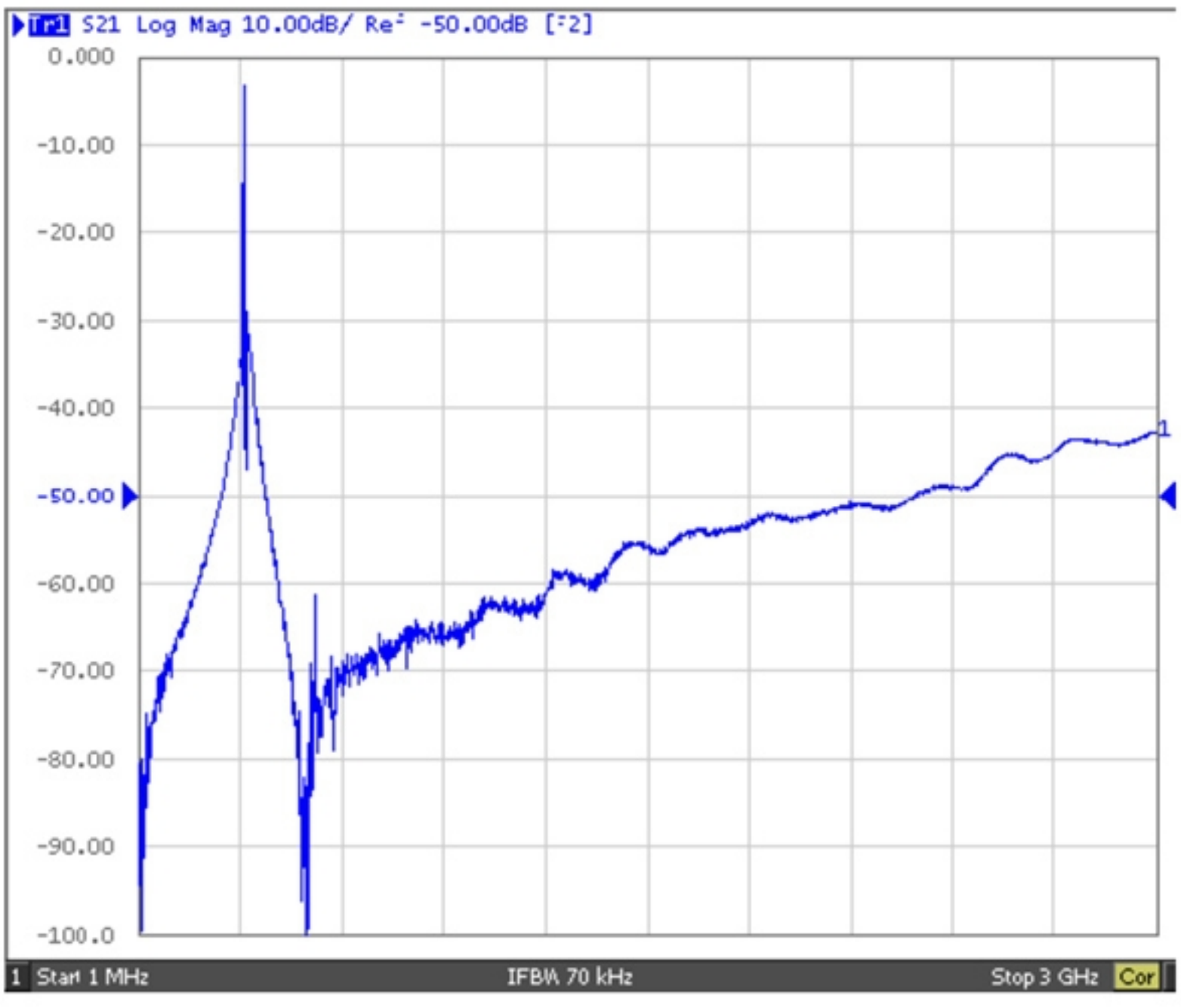
S21 response: span 20MHz



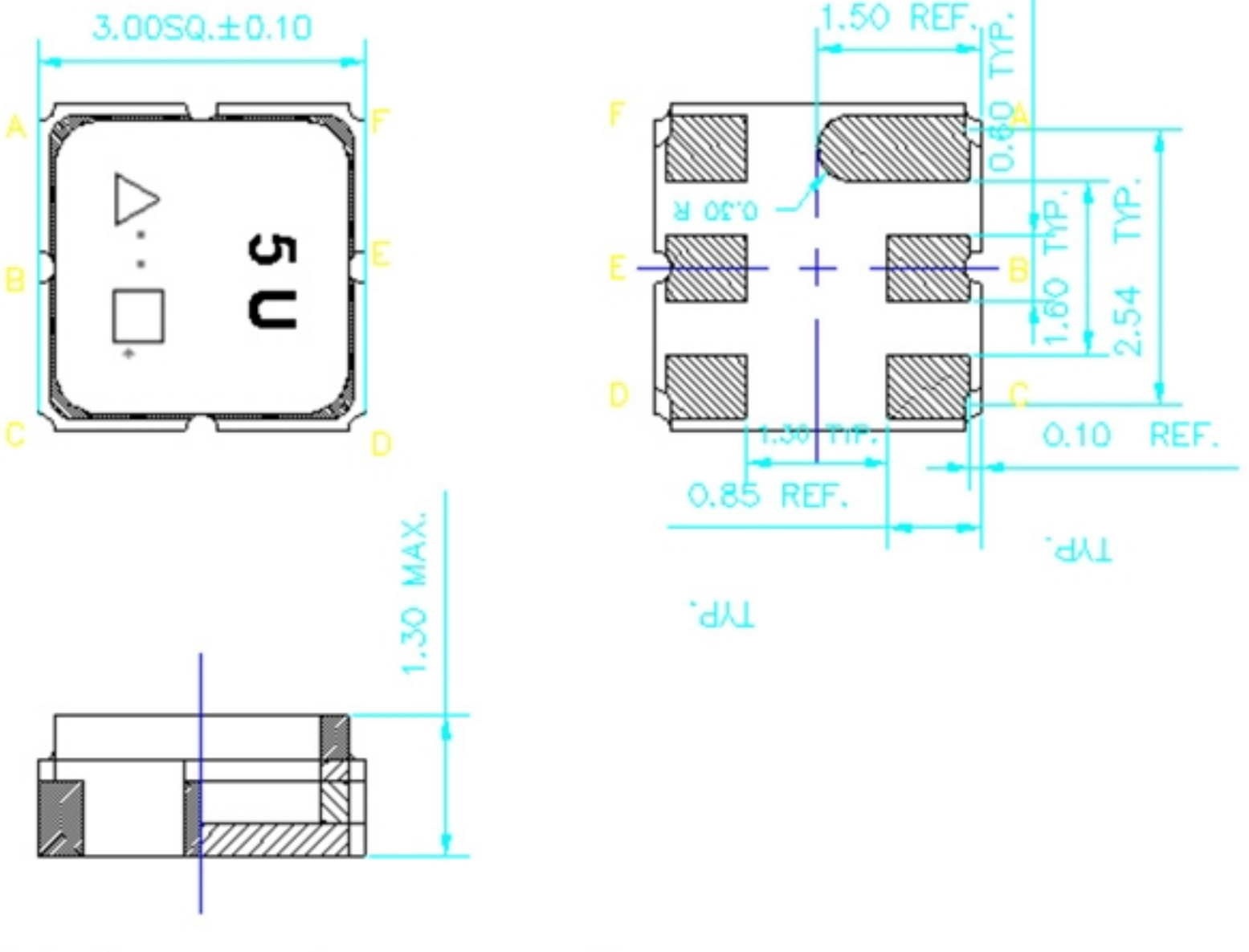
S21 response: span 5MHz



S21 response: span 1 MHz ~2.5 GHz



E.OUTLINE DRAWING:



#A: Input or input ground
#B: Input or input ground
#D: Output or output ground
#E: Output or output ground
#C.F Ground
△: Year code(ex 2008-> 8
□: Date code
Unit:mm

Data code：See the table

WK	01	02	…	26	27	28	…	52
Code	A	B	…	Z	a	b	…	z

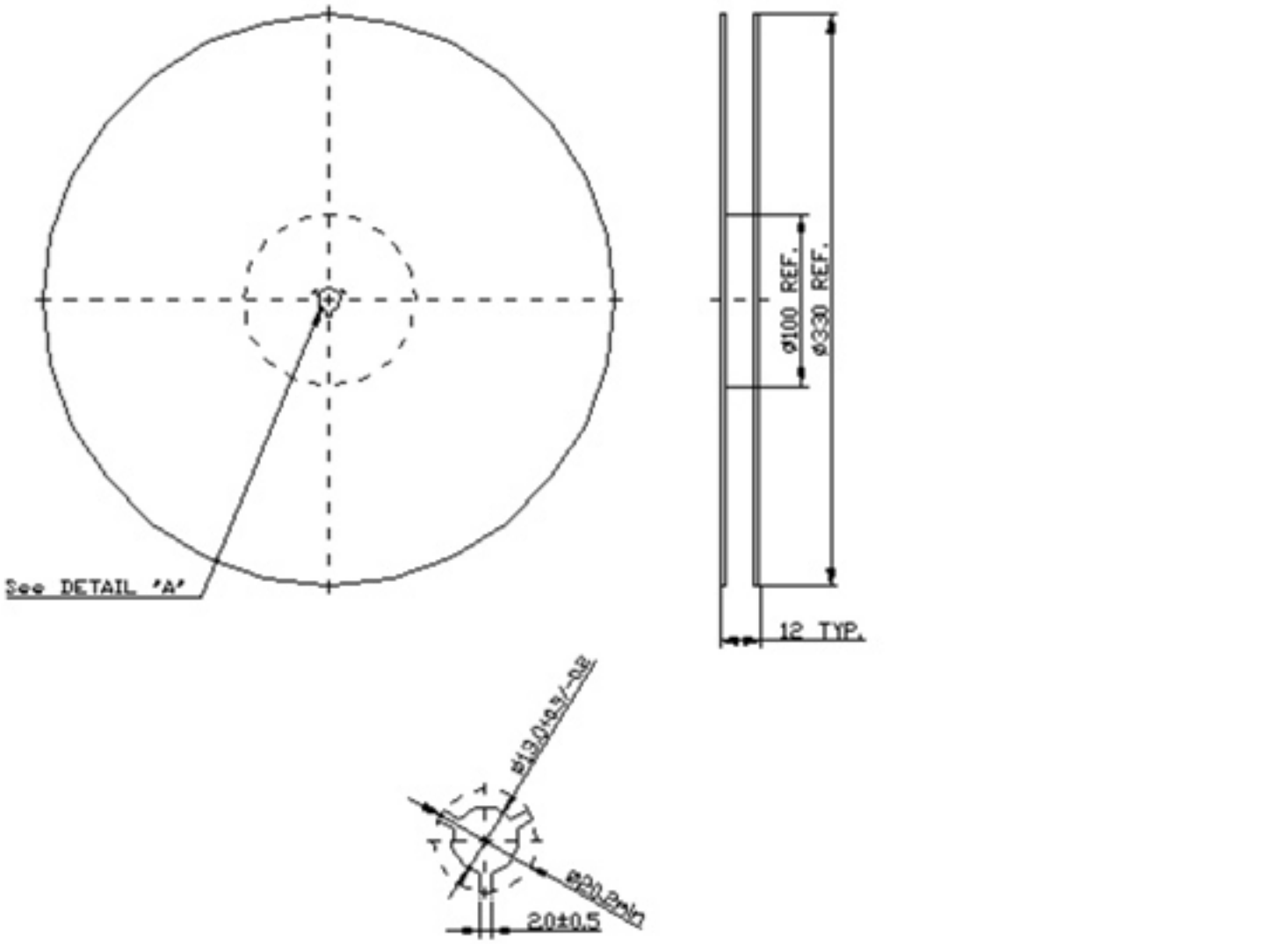
Δ Year code：See the table

Year	2008	2009	2010	2011	…	2019	2020
Code	8	9	0	1	…	9	0

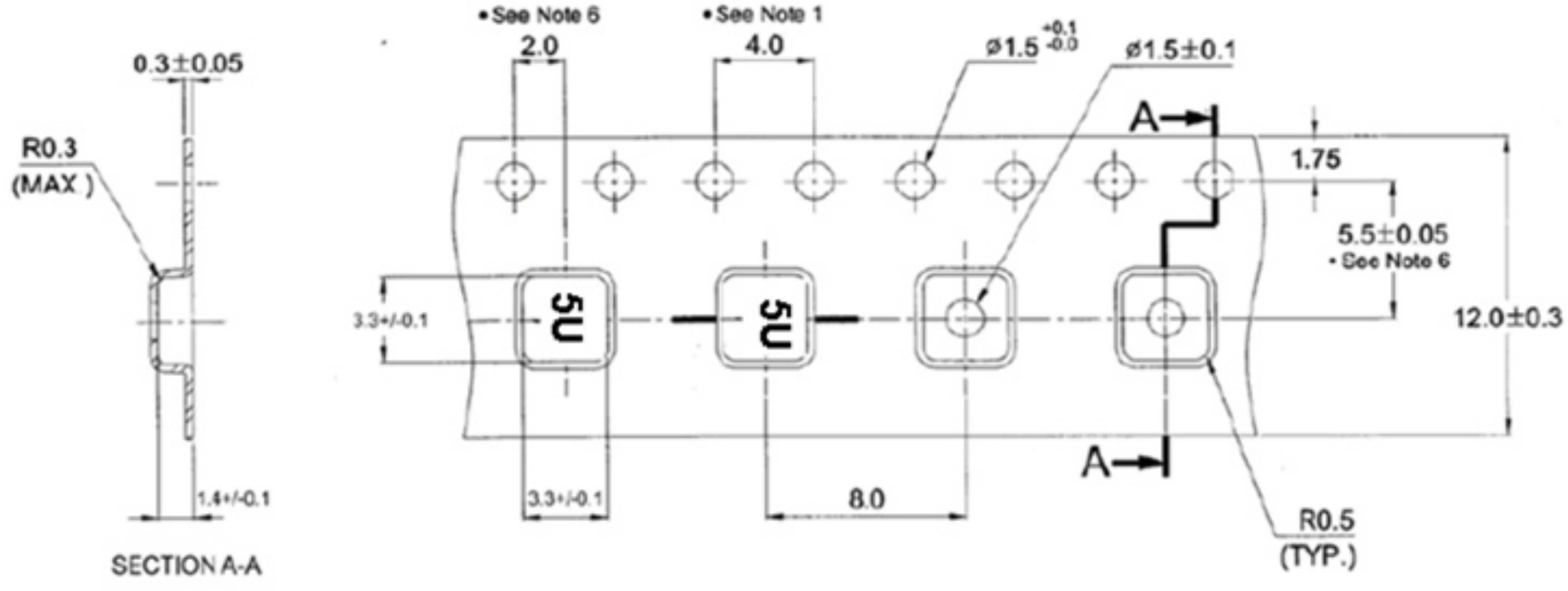
F. <u>PACKING:</u>

1. REEL DIMENSION

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



2. TAPE DIMENSION



Direction of Feed

G. RECOMMENDED REFLOW PROFILE :

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.