SAW Filter 530 MHz

MODEL NO.: TA2420A REV. NO.:3

A. MAXIMUM RATING:

1. Input Power Level: 20 dB_m(CW for 70000hrs at 25°C)
2. DC voltage: 5 V
3. Operating Temperature: -40°C to +105°C
4. Storage Temperature: -40°C to +105°C
5. Moisture Sensitivity Level: Level 1(**MSL1**)

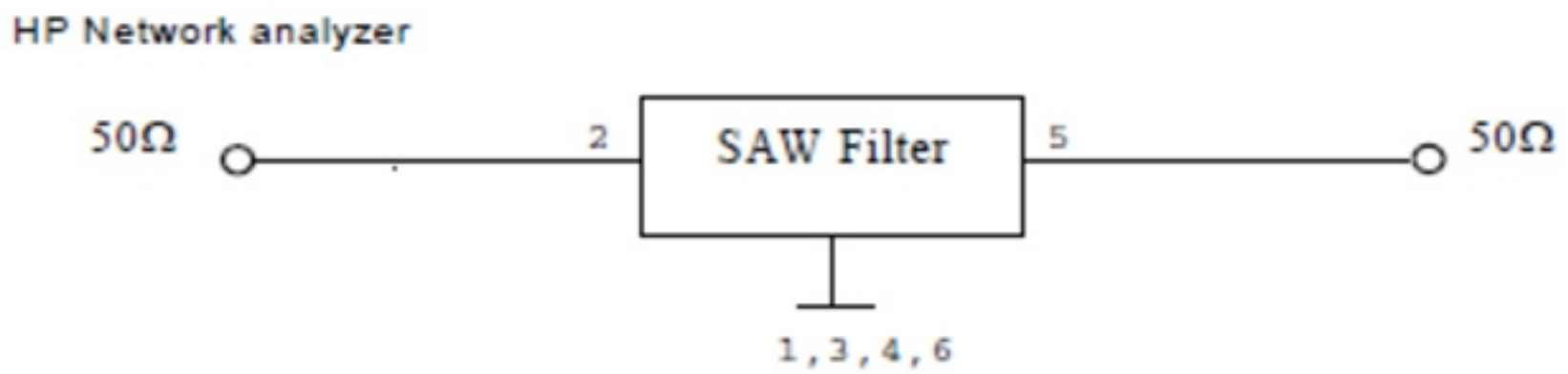
RoHS Compliant
Lead free
Lead-free soldering

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

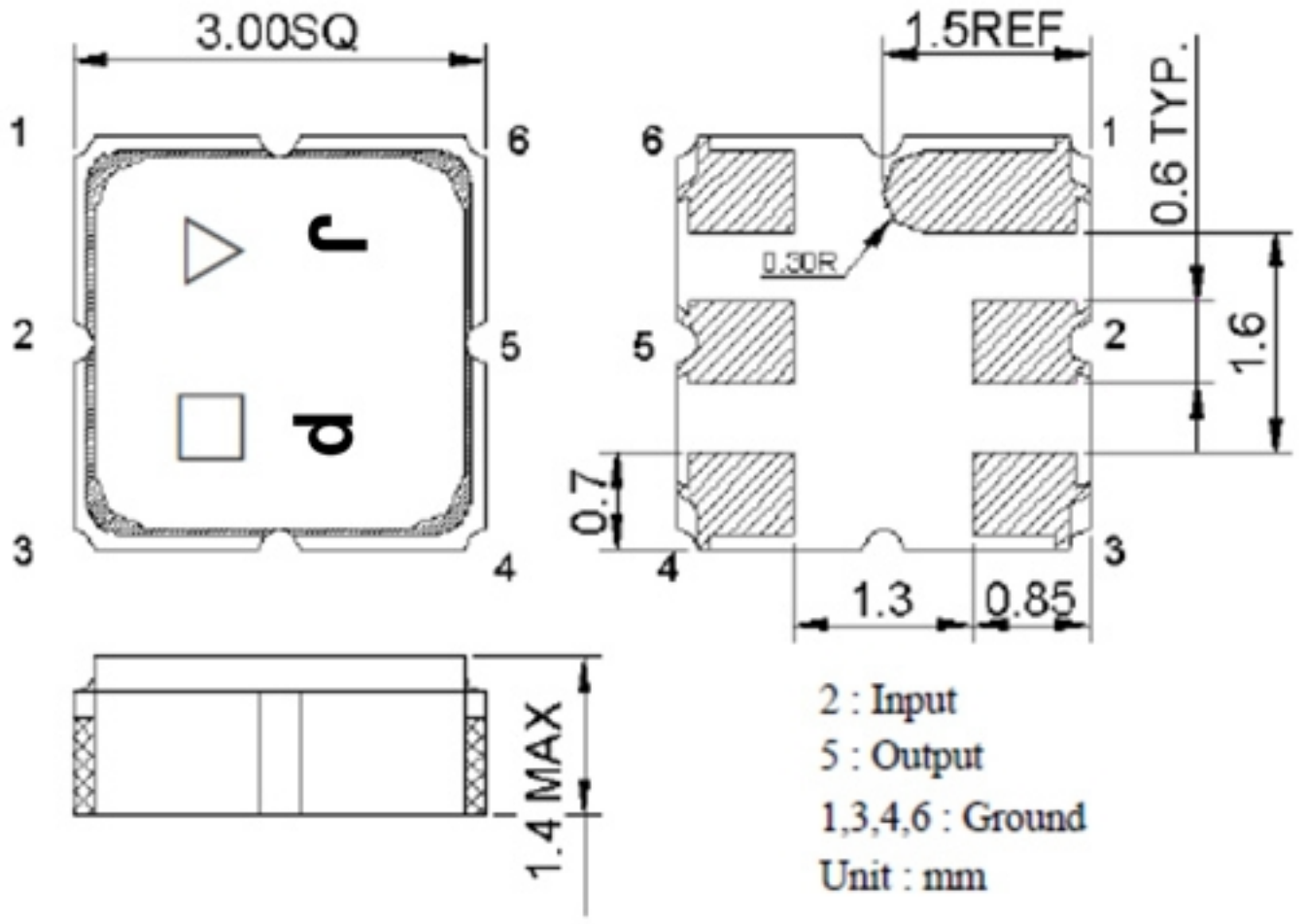
B. ELECTRICAL CHARACTERISTICS:

Item		Unit	min	type	Max
Center Frequency	**Fc**	MHz		530	
Insertion Loss 518~542MHz **(0°C to +50°C)**		dB		2.3	3.5
Insertion Loss 518~542MHz **(-40°C to +105°C)**		dB		2.3	4.0
Return Loss 518~542MHz **(0°C to +50°C)**		dB	12	15	
Pass band 518~542MHz		MHz	24	35	
Attenuation (Reference level from 0dB)					
10~360	MHz	dB	**48**	54	
360~470	MHz	dB	35	45	
620~850	MHz	dB	38	44	
850~1100	MHz	dB	32	40	
Temperature Coefficient of Frequency		ppm/℃	-75 typ		

C. MEASUREMENT CIRCUIT:



D. OUTLINE DRAWING:



2 : Input
5 : Output
1,3,4,6 : Ground
Unit : mm

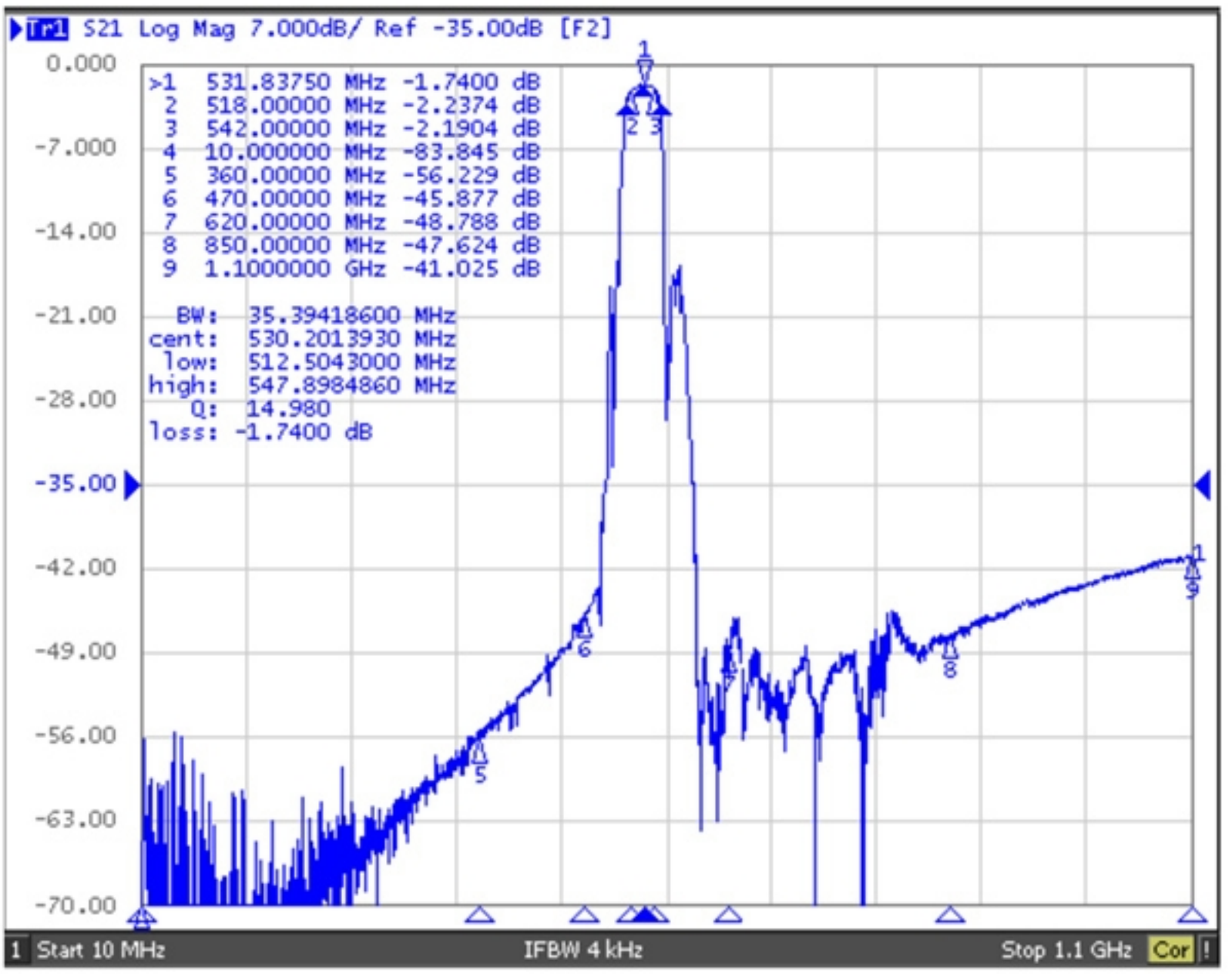
△ : Year Code (2009->9, 2010->0,…, 2018->8)
□ : Date Code (Follow the table from planner each year)

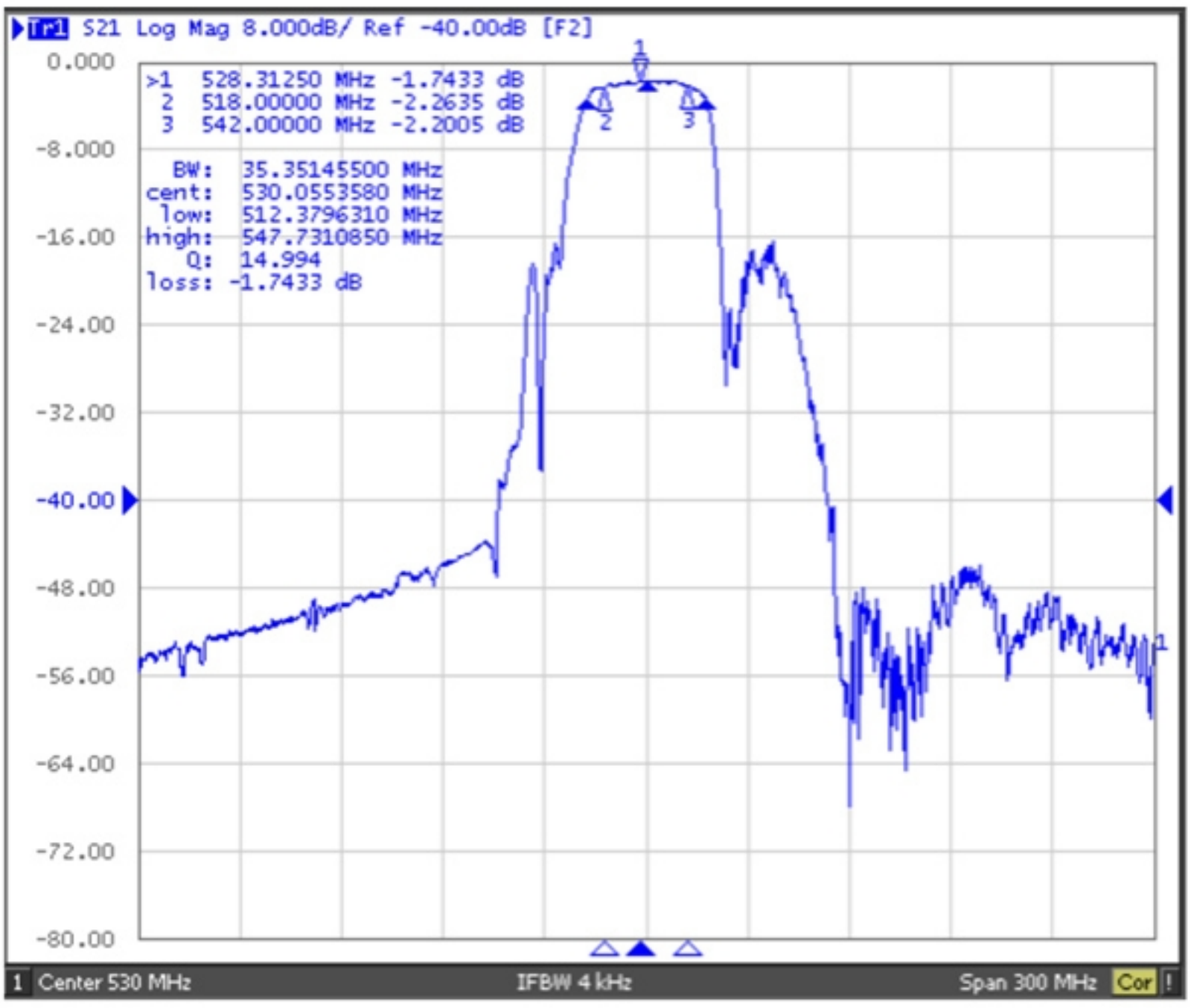
Date Code Table

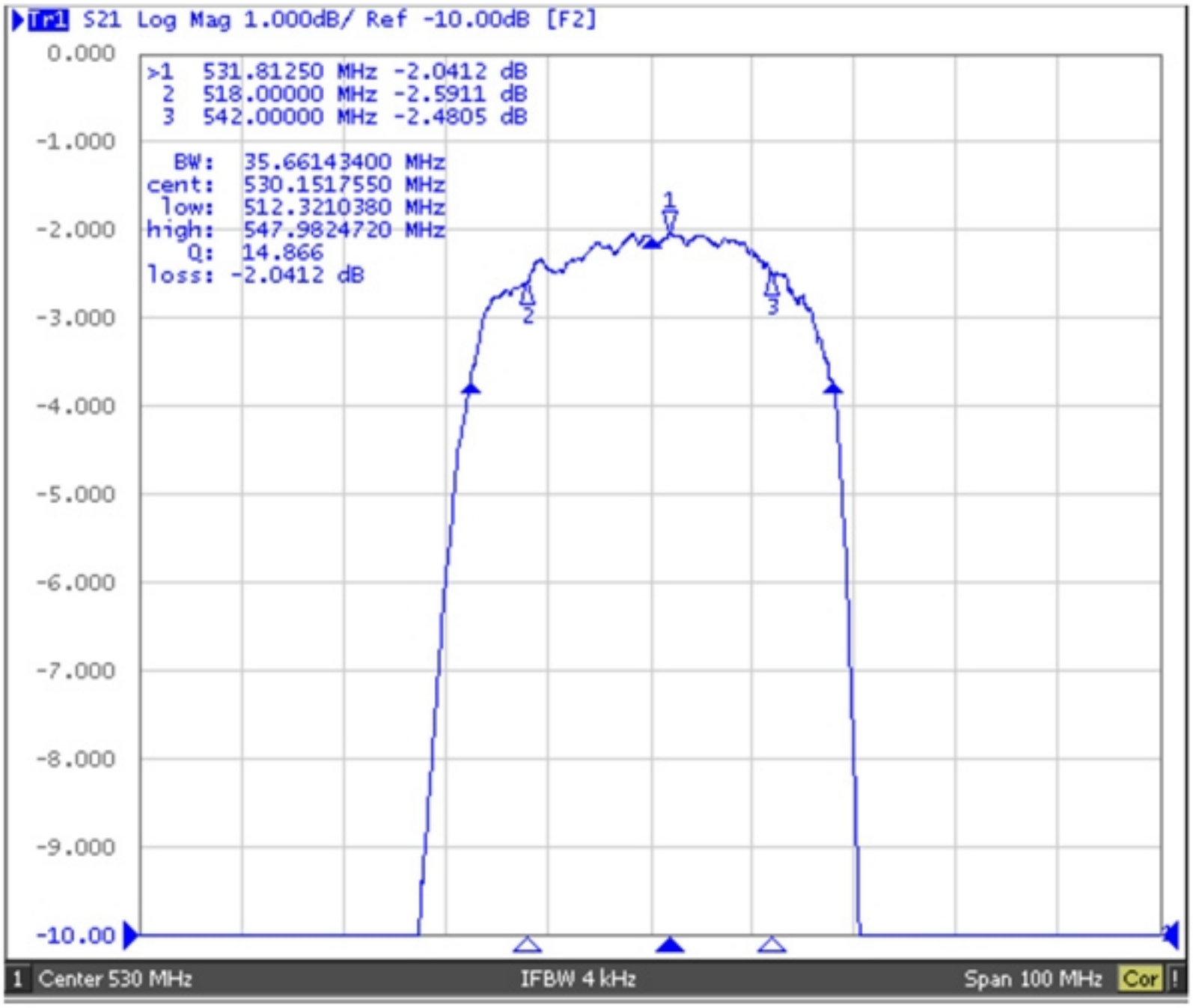
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

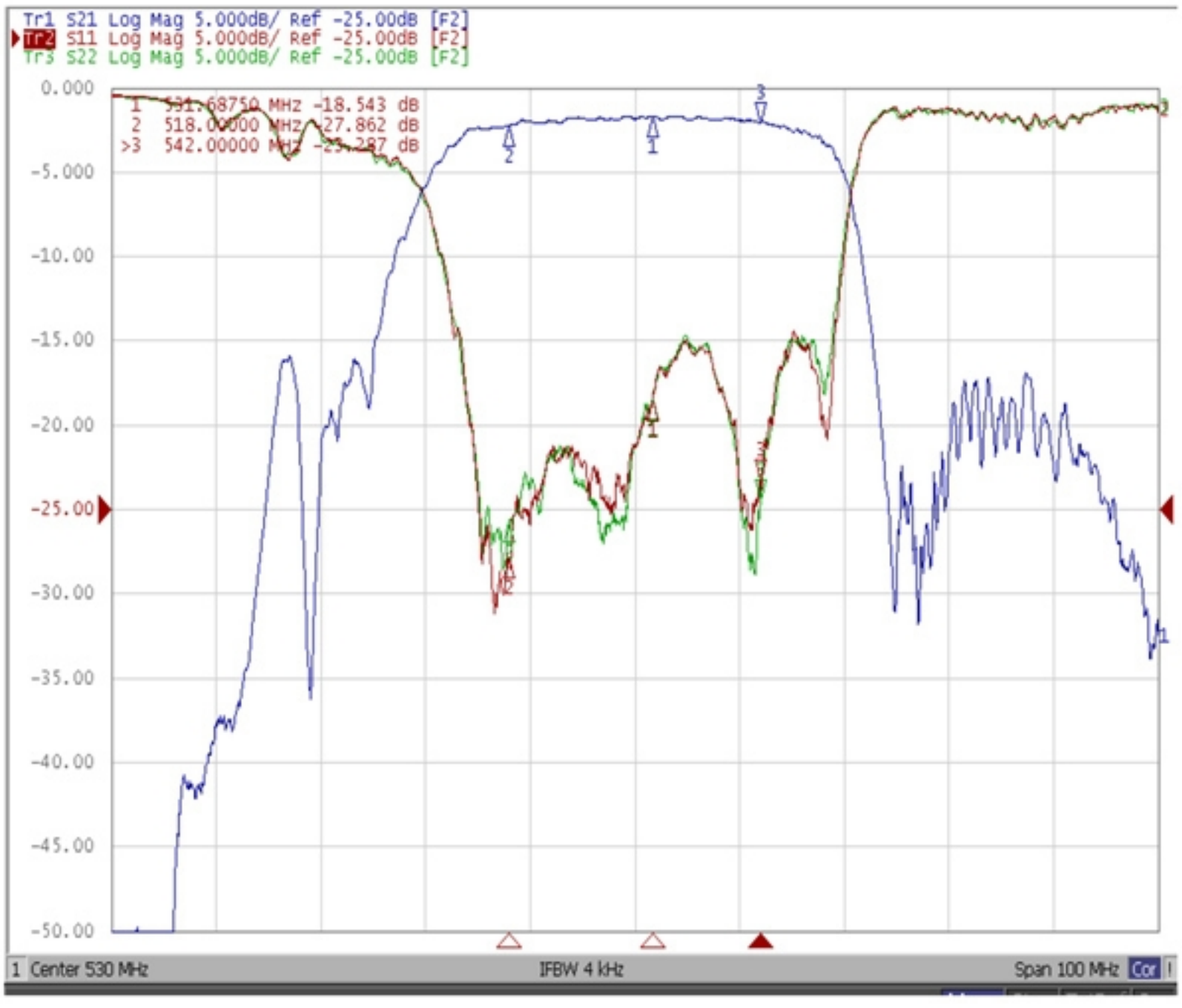
E. PCB Footprint:

F. Frequency Characteristics:





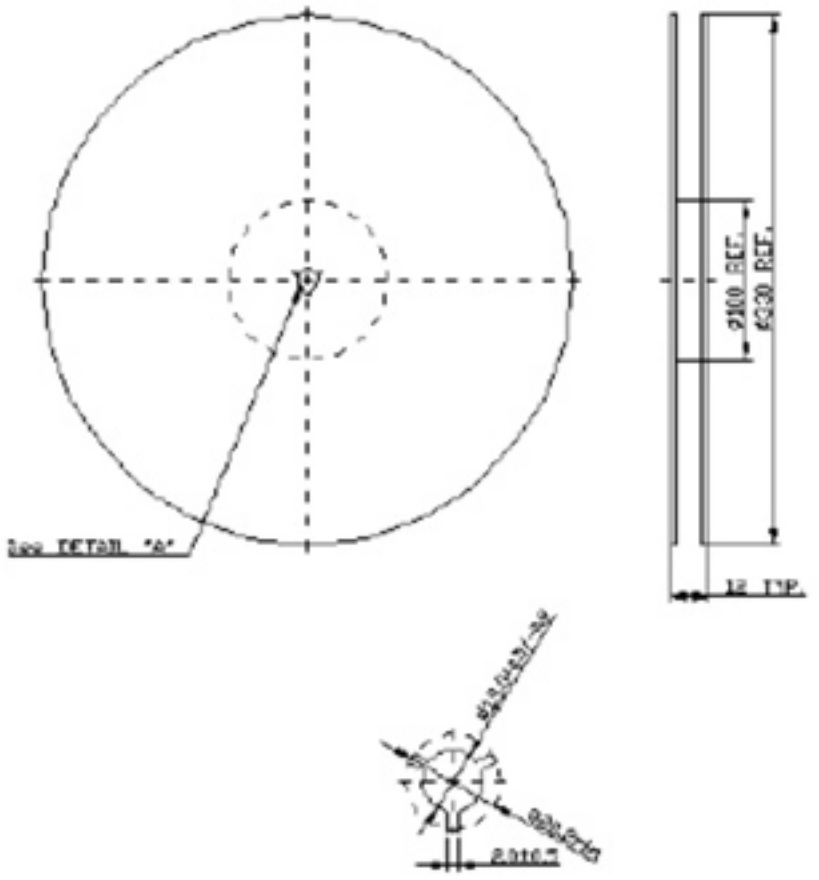

Tr1 S21 Log Mag 1.000dB/ Ref -10.00dB [F2]
>1 531.81250 MHz -2.0412 dB
2 518.00000 MHz -2.5911 dB
3 542.00000 MHz -2.4805 dB
BW: 35.66143400 MHz
cent: 530.1517550 MHz
low: 512.3210380 MHz
high: 547.9824720 MHz
Q: 14.866
loss: -2.0412 dB
0.000
-1.000
-2.000
-3.000
-4.000
-5.000
-6.000
-7.000
-8.000
-9.000
-10.00
1 Center 530 MHz
IFBW 4 kHz
Span 100 MHz
Cor


Tr1 S21 Log Mag 5.000dB/ Ref -25.00dB [F2]
Tr2 S11 Log Mag 5.000dB/ Ref -25.00dB [F2]
Tr3 S22 Log Mag 5.000dB/ Ref -25.00dB [F2]
1 531.68750 MHz -18.543 dB
2 518.00000 MHz -27.862 dB
>3 542.00000 MHz -25.287 dB
0.000
-5.000
-10.00
-15.00
-20.00
-25.00
-30.00
-35.00
-40.00
-45.00
-50.00
1 Center 530 MHz
IFBW 4 kHz
Span 100 MHz
Cor

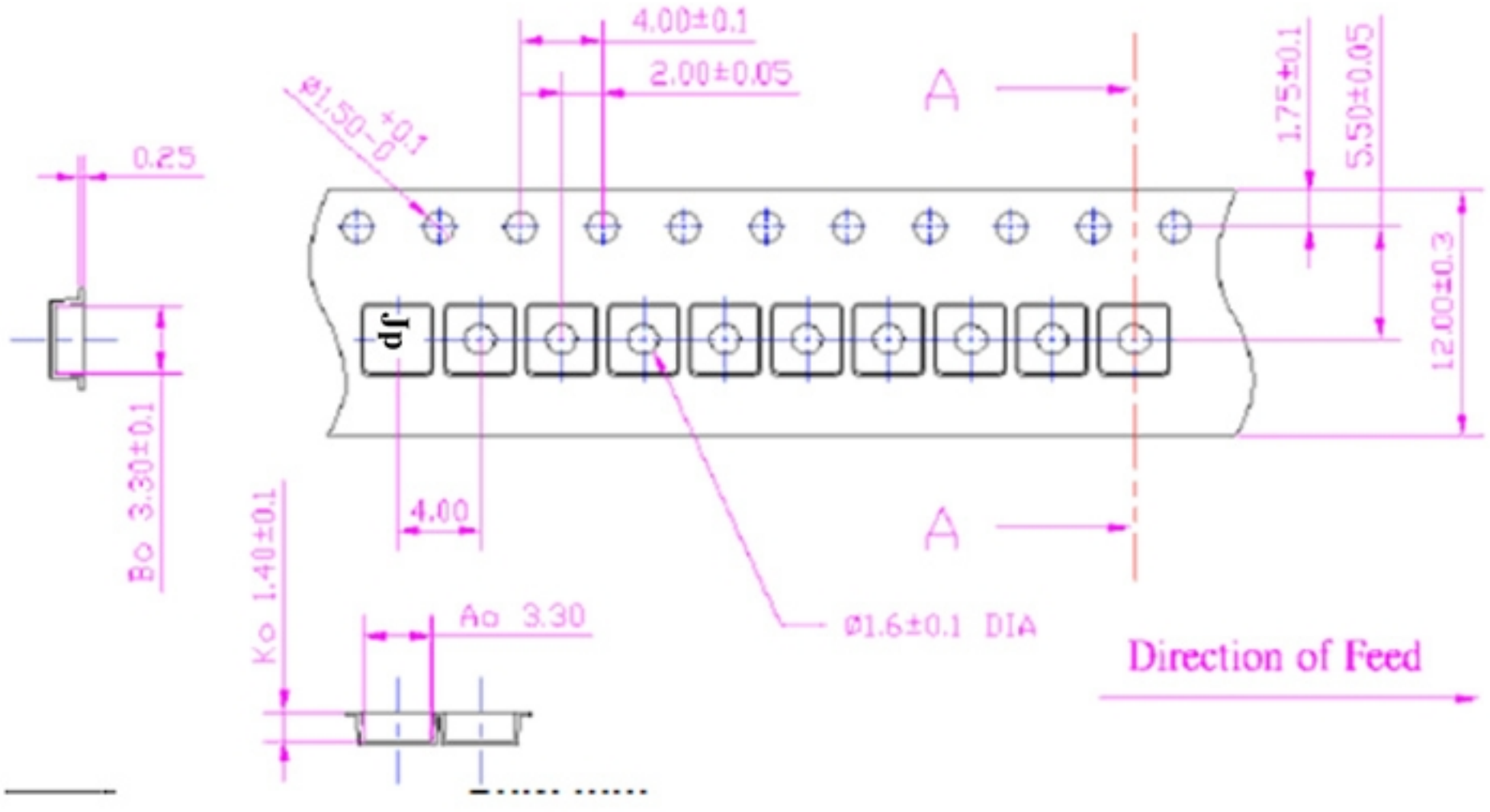
G. PACKING: (Ref. WI-75M03)

1. REEL DIMENSION

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



2. TAPE DIMENSION



H. 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.