

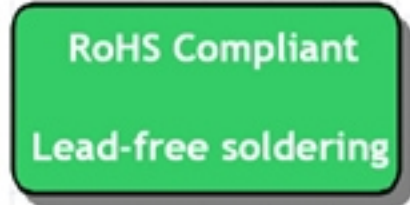
SAW Filter 1176 MHz

MODEL NO.: TA2499A

REV. NO.:1

A. MAXIMUM RATING:

1. Input Power Level: 10 dB_m
2. DC voltage: 3 V
3. Operating Temperature: -40°C to +105°C
4. Storage Temperature: -40°C to +105°C
5. Moisture Sensitivity Level: Level 1 (**MSL1**)

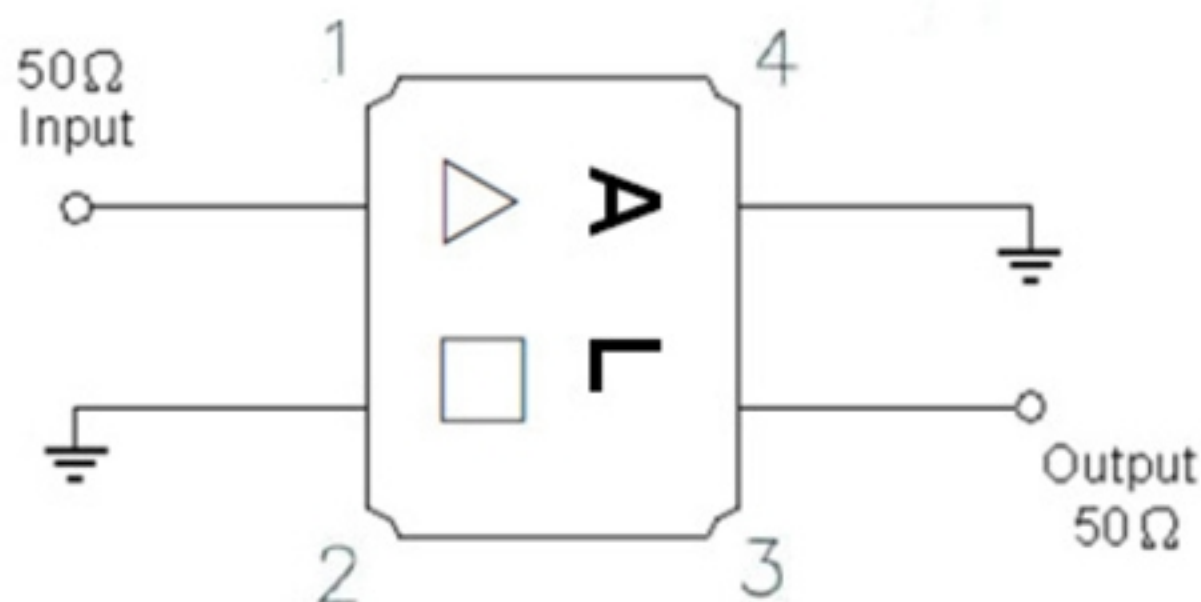


Electrostatic Sensitive Device (**ESD**)

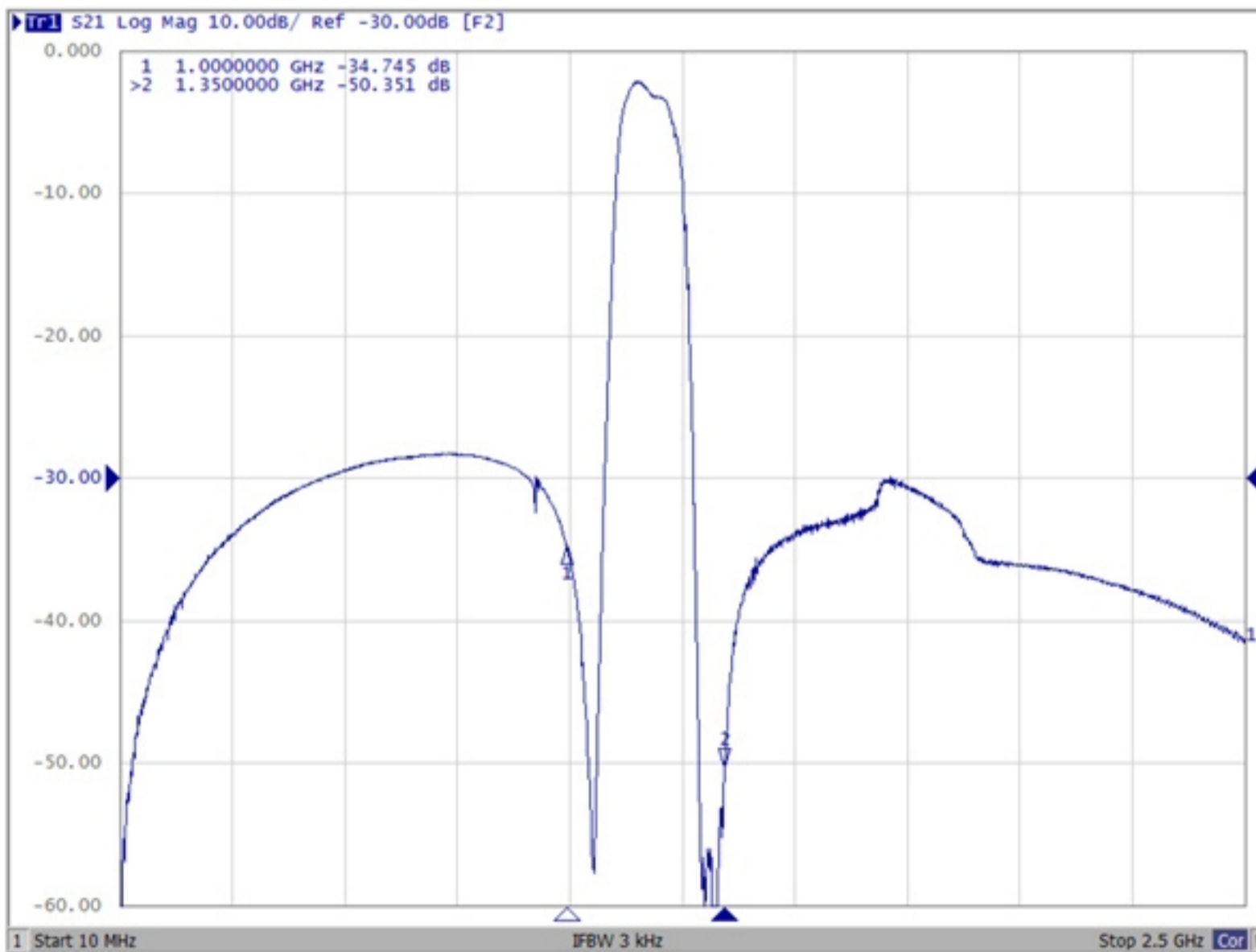
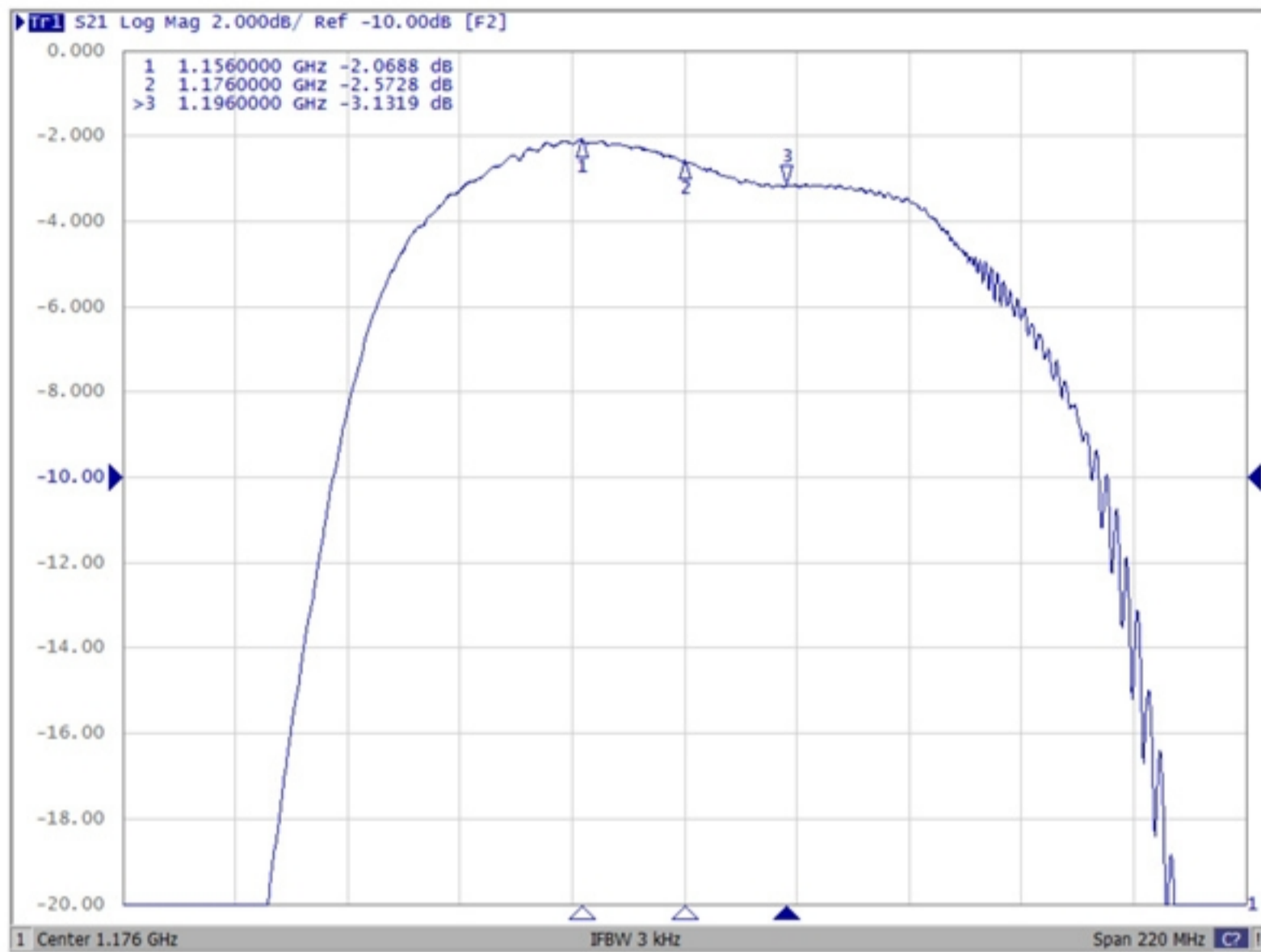
B. ELECTRICAL CHARACTERISTICS:

Item	Unit	Min.	Typ.	Max.	Note	
Center frequency	Fc MHz	-	1176	-	-	
Insertion Loss (1156~1196 MHz)	IL dB	-	3.2	3.8	-40~+85°C	
Insertion Loss (1156~1196 MHz)	IL dB	-	3.2	4.0	-40~+105°C	
Group Delay Ripple (1156~1196 MHz)	ns	-	2	5.0	-	
Return Loss_S11 (1156~1196 MHz)	dB	9.5	10	-	-	
Attenuation (Reference level from 0 dB)						
DC ~ 920 MHz	dB	25	27	-	-	
1350 ~ 1780 MHz	dB	28	30	-	-	
1850 ~ 1910 MHz	dB	30	32	-	-	
1920 ~ 1980 MHz	dB	30	32	-	-	
2400 ~ 2500 MHz	dB	35	38	-	-	
Temperature coefficient of frequency	ppm/k	-	-80	-	-	

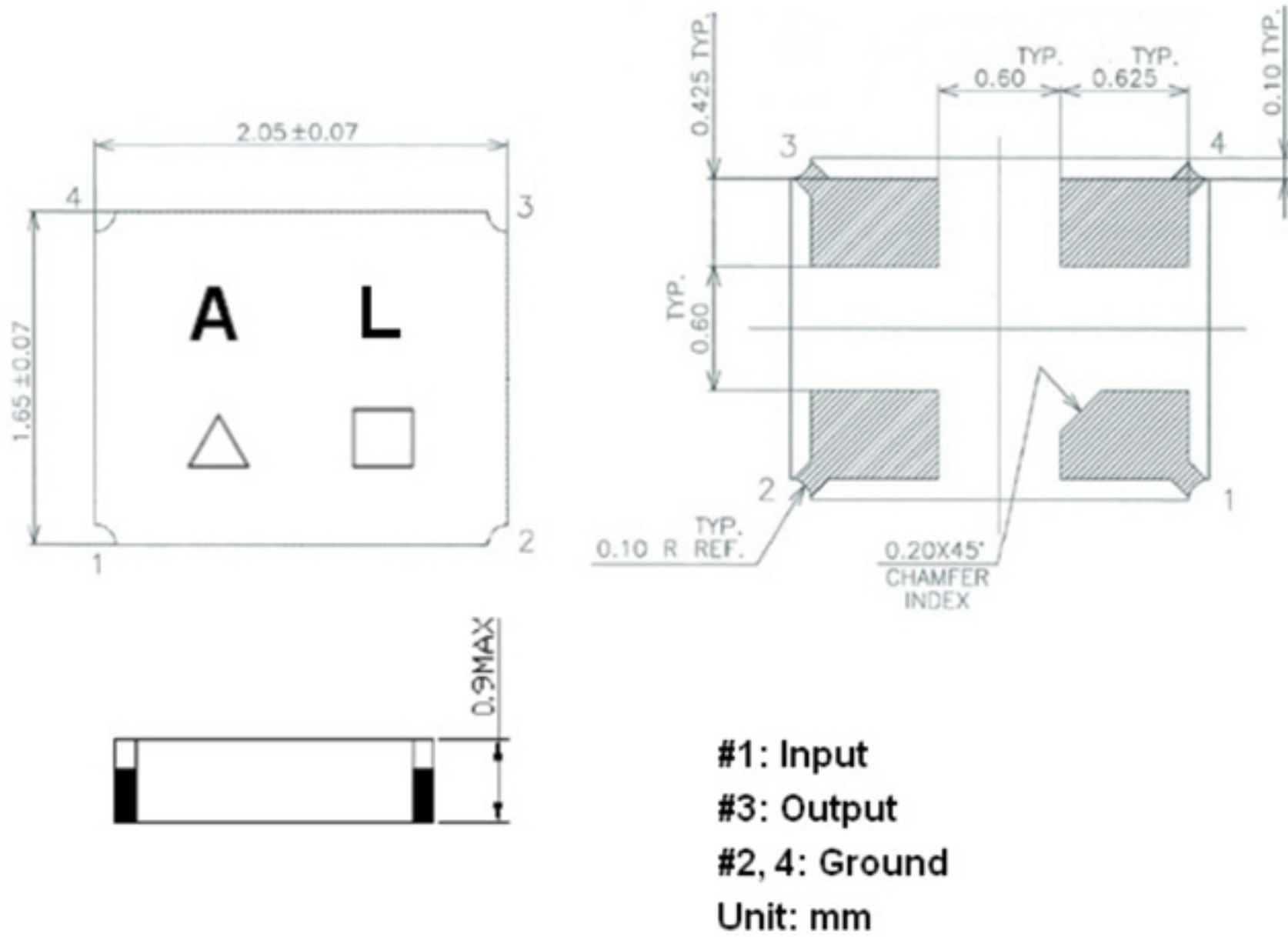
C. MEASUREMENT CIRCUIT:



D. Frequency Characteristics:



E. OUTLINE DRAWING:



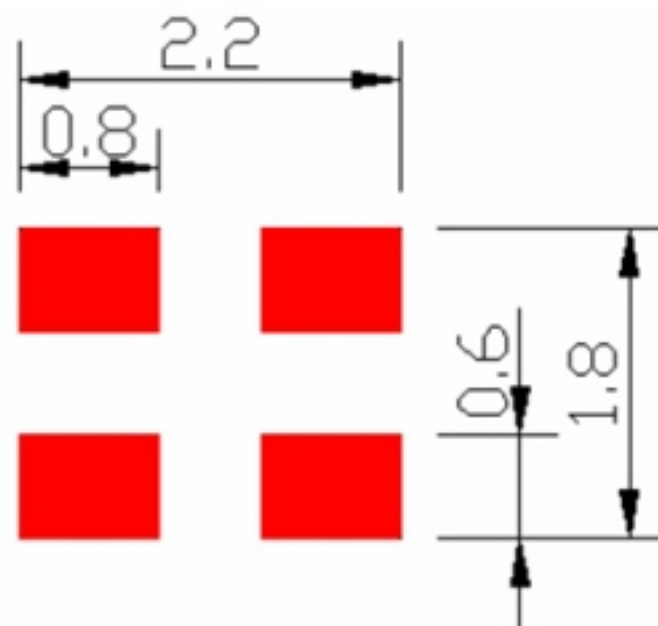
Δ : Year Code (2020→0, 2021→1, ..., 2029→9)

\square : 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

F. PCB Footprint:



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 (20~40sec).
4. Time: 2 times.

