

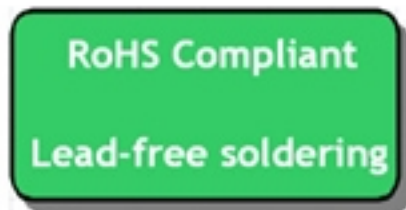
# SAW Filter 916.45 MHz

MODEL NO.: TA1727A

REV. NO.:2

## A. MAXIMUM RATING:

1. Input Power Level: 20 dB<sub>m</sub>
2. DC voltage: 5 V
3. Operating Temperature: -30°C to +85°C
4. Storage Temperature: -40°C to +85°C
5. Moisture Sensitivity Level: Level 1(**MSL1**)



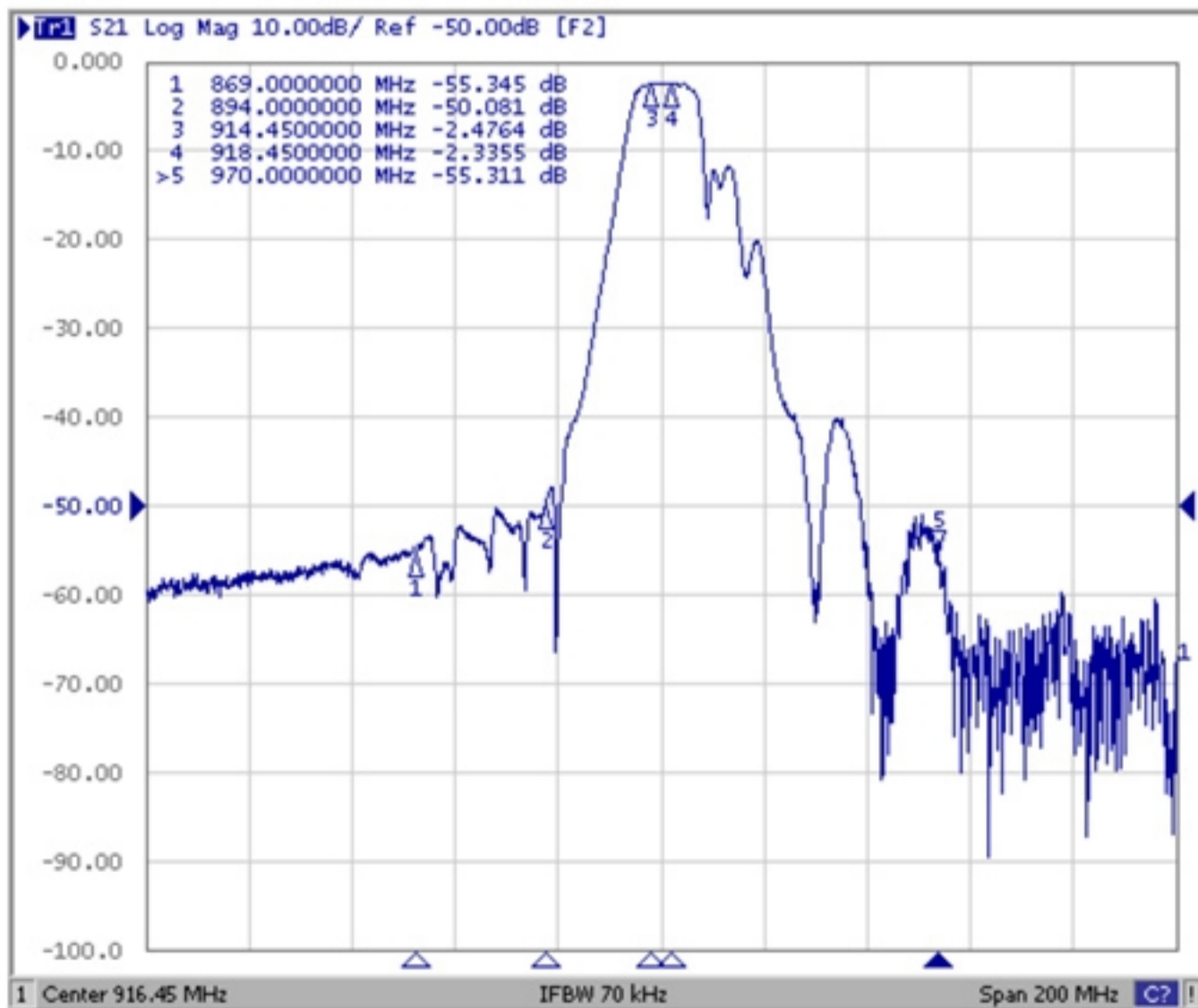
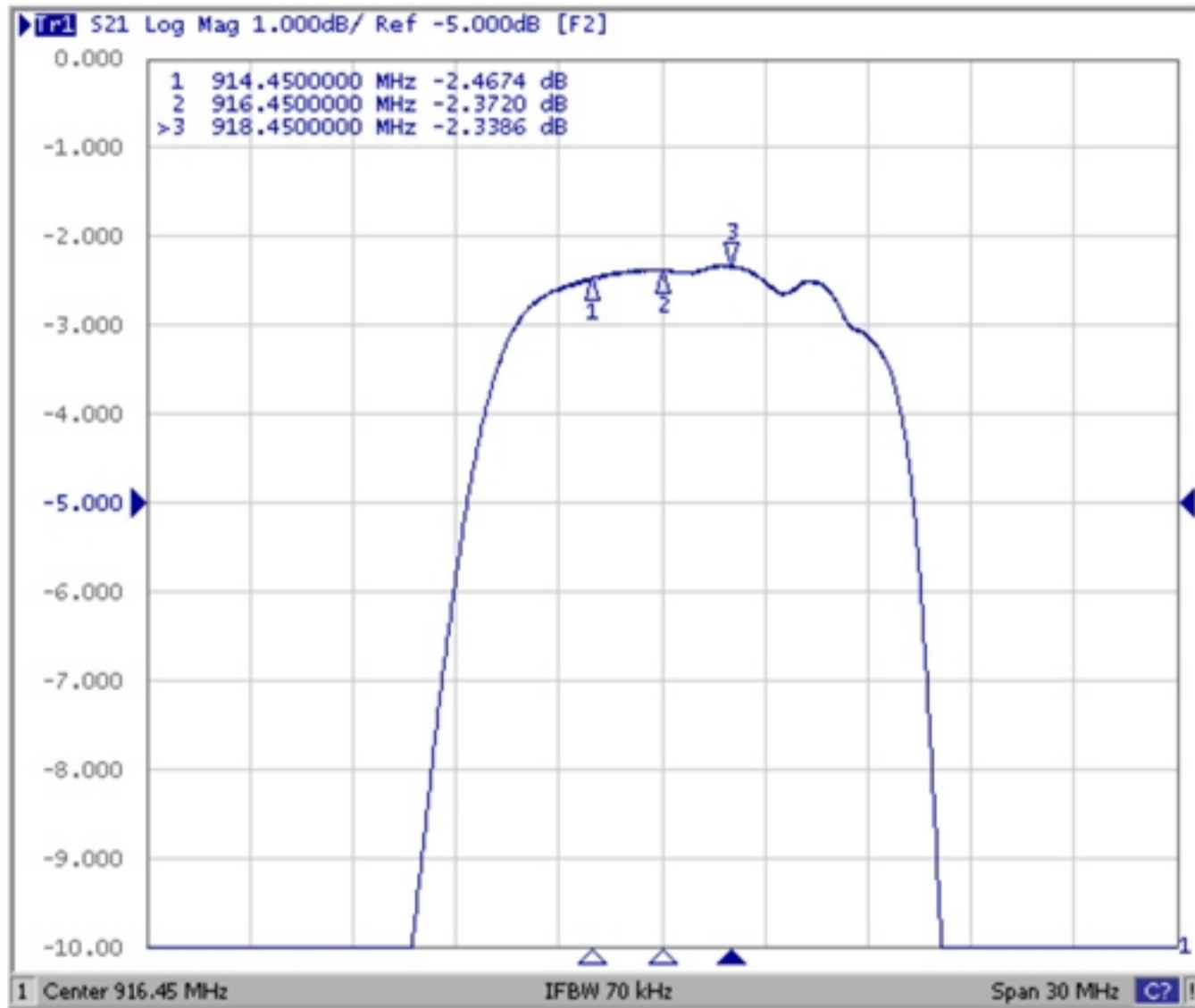
Electrostatic Sensitive Device (**ESD**)

## B. ELECTRICAL CHARACTERISTICS:

Item		Unit	Min.	Typ.	Max.
<b>Center frequency</b>	<b>F<sub>c</sub></b>	MHz	-	916.45	-
<b>Insertion loss</b>	914.45 ~ 918.45 MHz <b>IL</b>	dB	-	2.7	3.5
<b>Amplitude ripple</b>	914.45 ~ 918.45 MHz	dB	-	0.3	1.0
<b>VSWR</b>	914.45 ~ 918.45 MHz	-	-	1.5	2.0
<b>Absolute Attenuation</b>					
D.C. ~ 600 MHz		dB	50	57	-
600 ~ 840 MHz		dB	40	51	-
869 ~ 894 MHz		dB	35	46	-
930 ~ 937 MHz		dB	8	13	-
970 ~ 1500 MHz		dB	40	47	-
1500 ~ 3000 MHz		dB	25	32	-
<b>Source impedance</b>	<b>Z<sub>s</sub></b>	Ω	-	50	-
<b>Load impedance</b>	<b>Z<sub>L</sub></b>	Ω	-	50	-

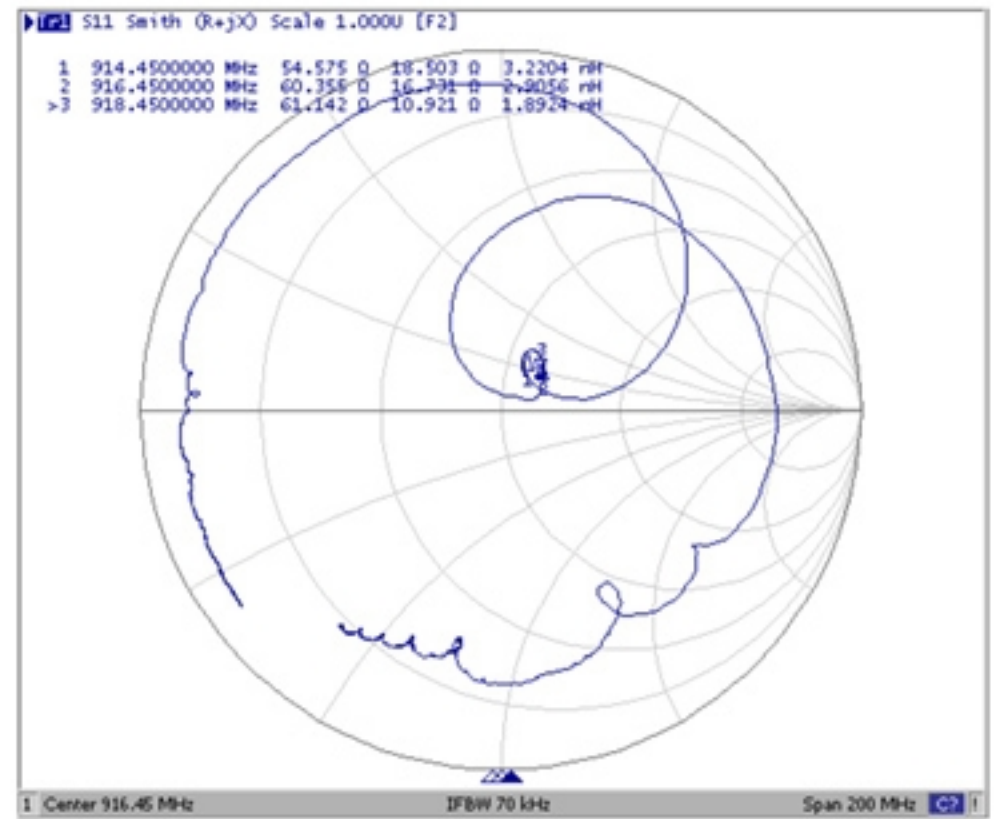
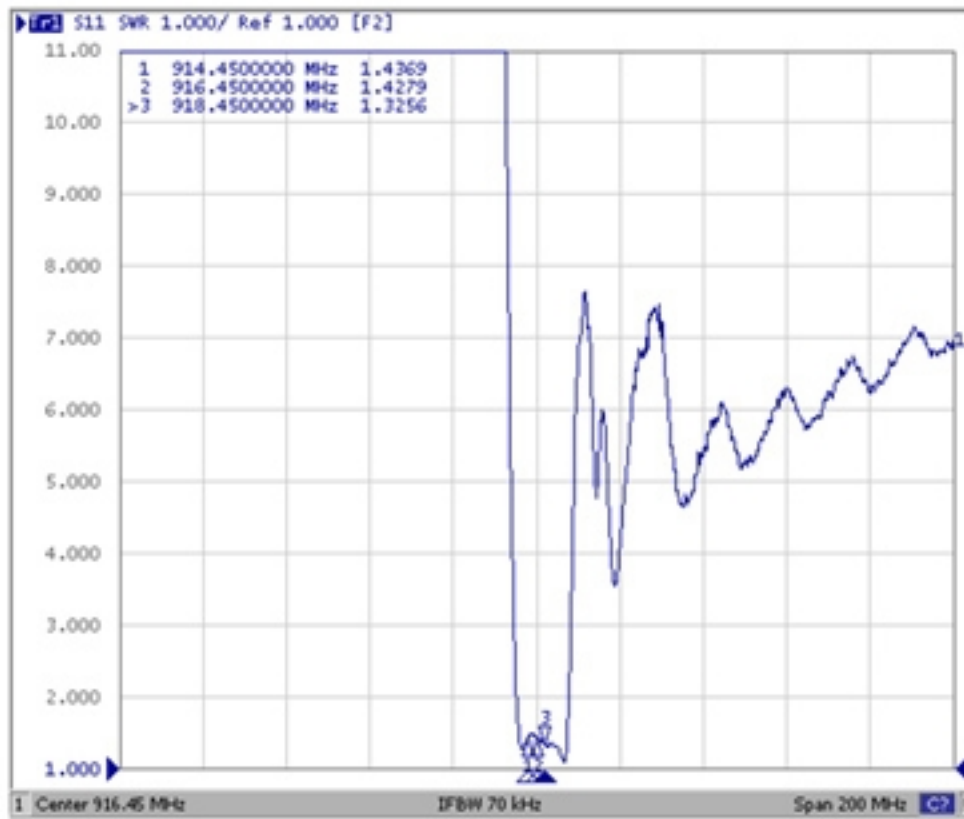
Note1. No matching network required for operation at 50 Ω

### C. Frequency Characteristics:

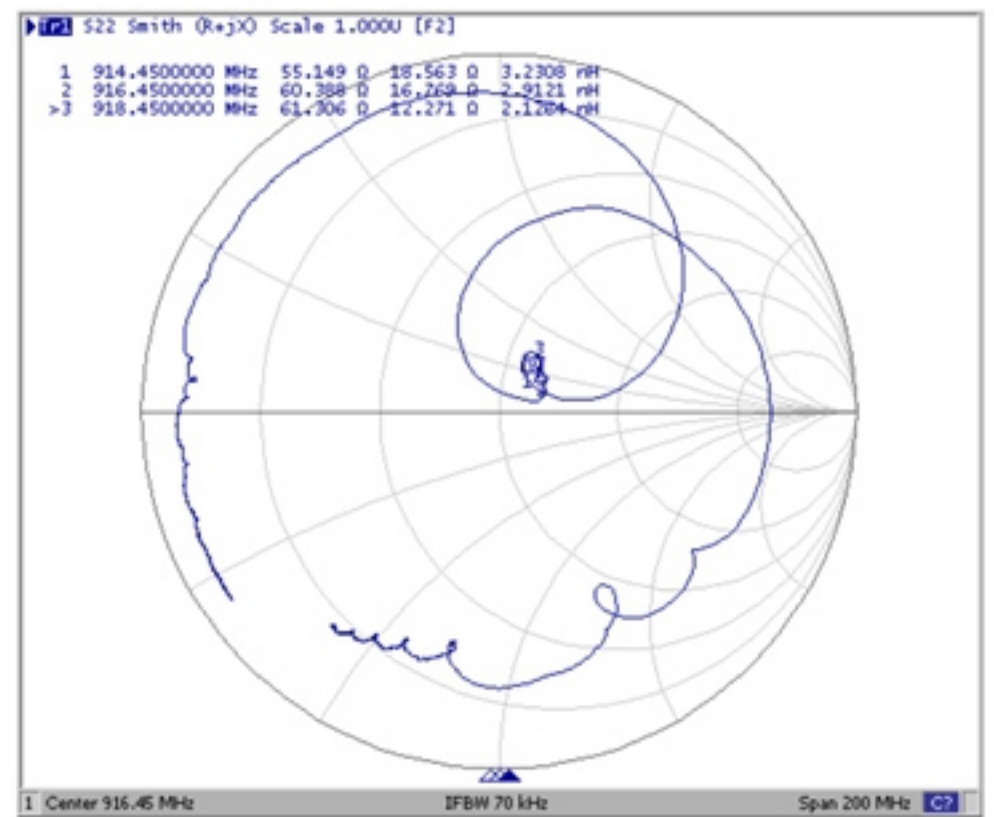
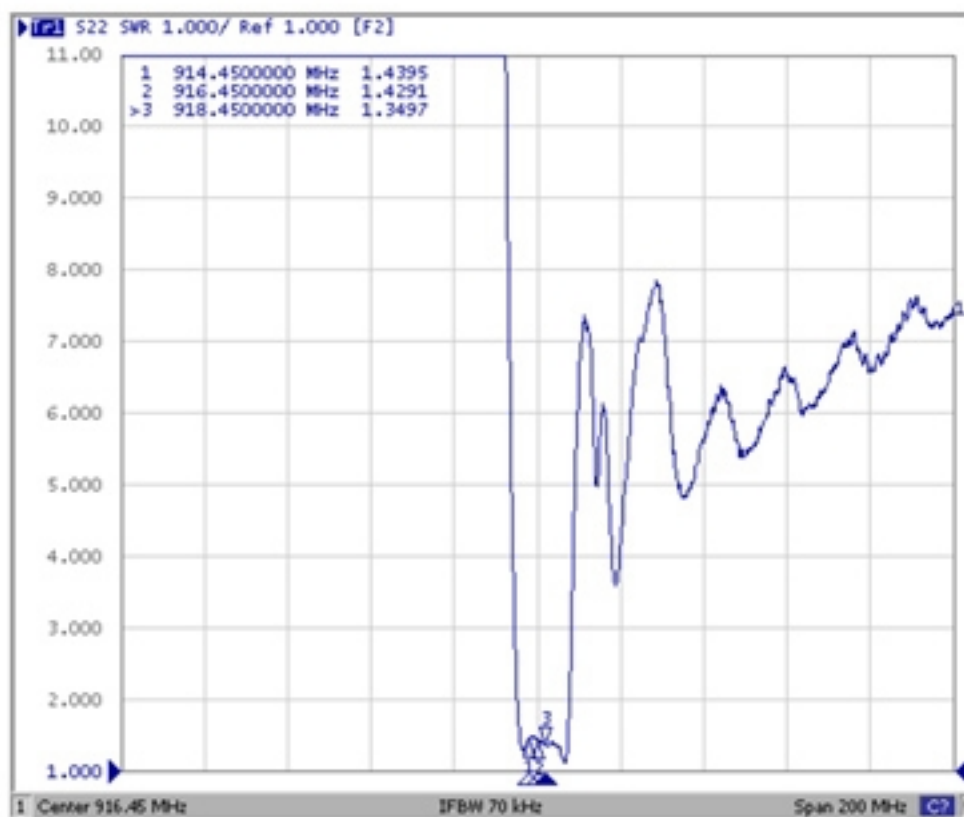


# Reflections Functions:

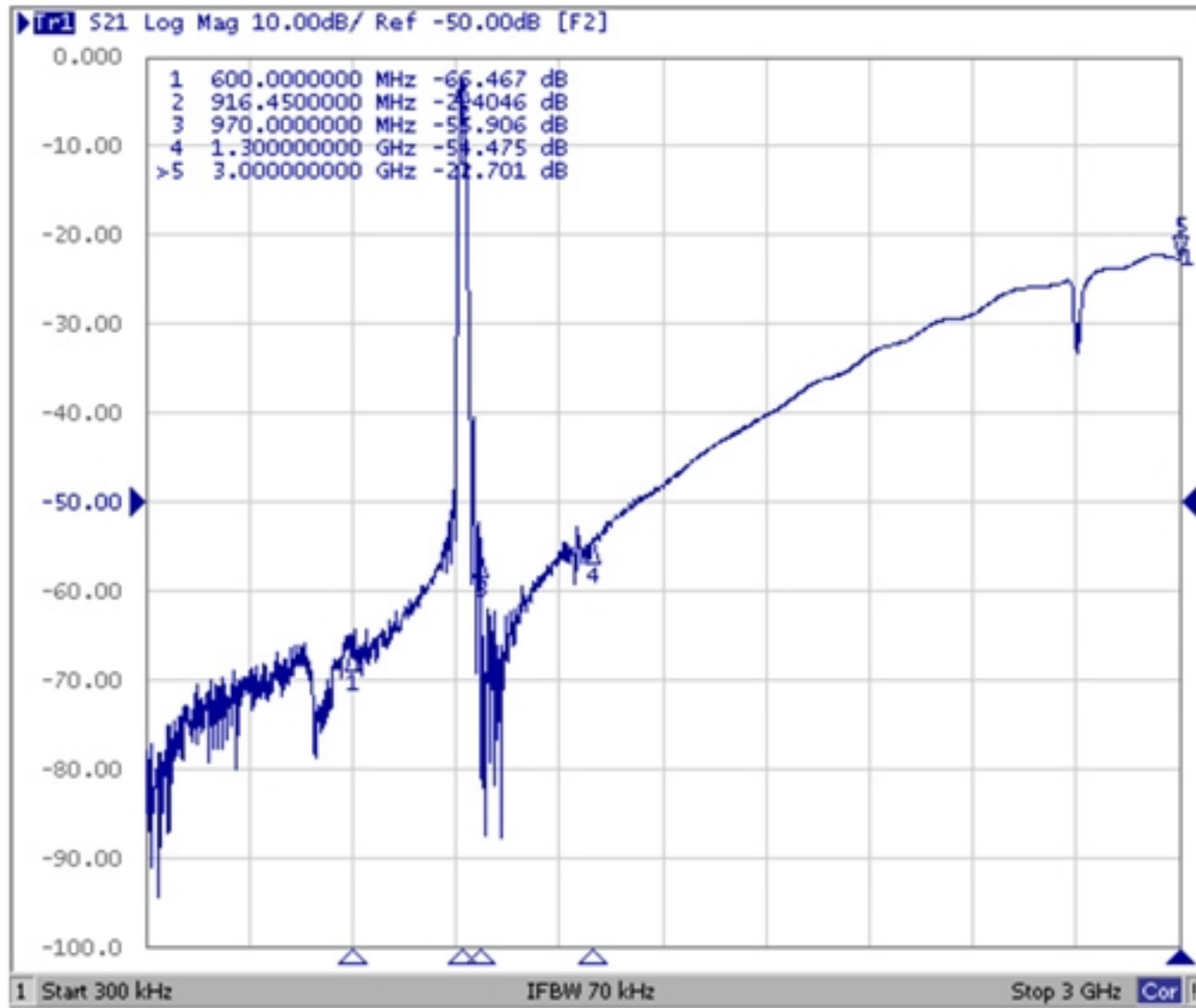
S11:



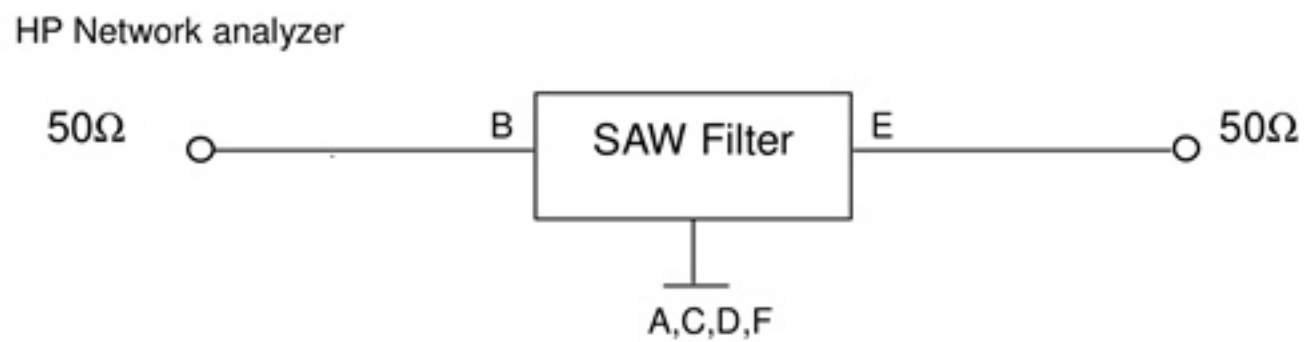
S22:



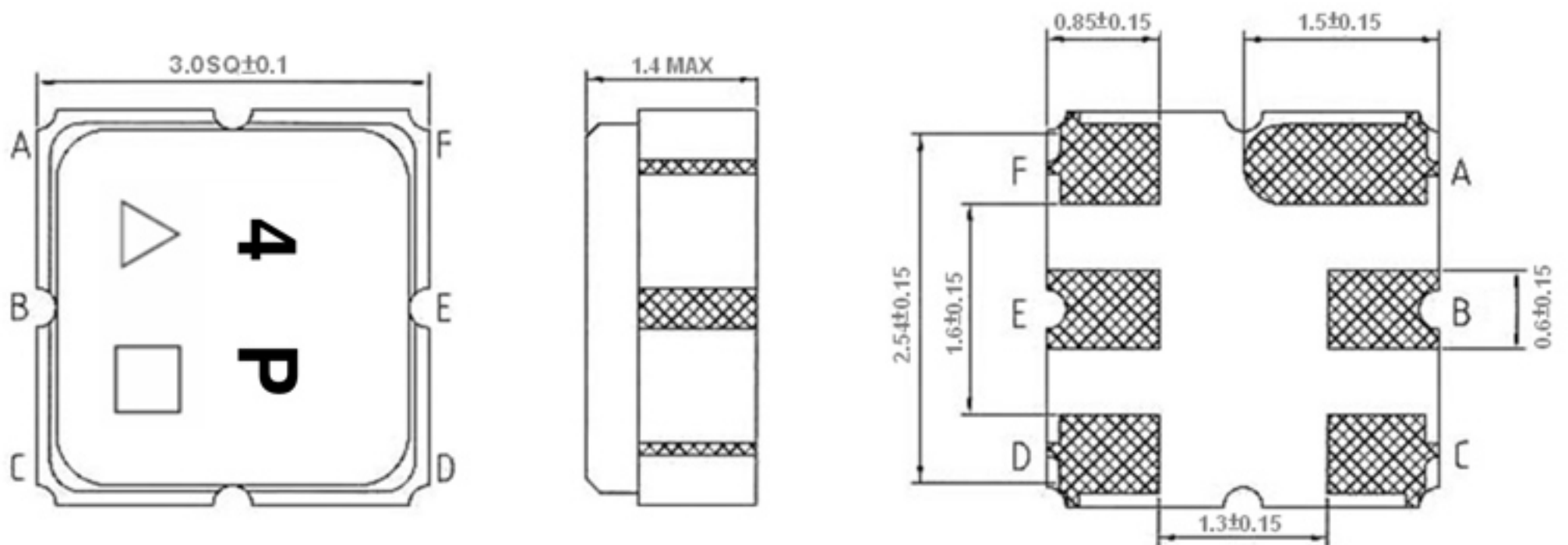
# Wideband



## D. MEASUREMENT CIRCUIT:



**E. OUTLINE DRAWING:**



**B: Input**

**E: Output**

**A, C, D, F: Ground**

**Unit: mm**

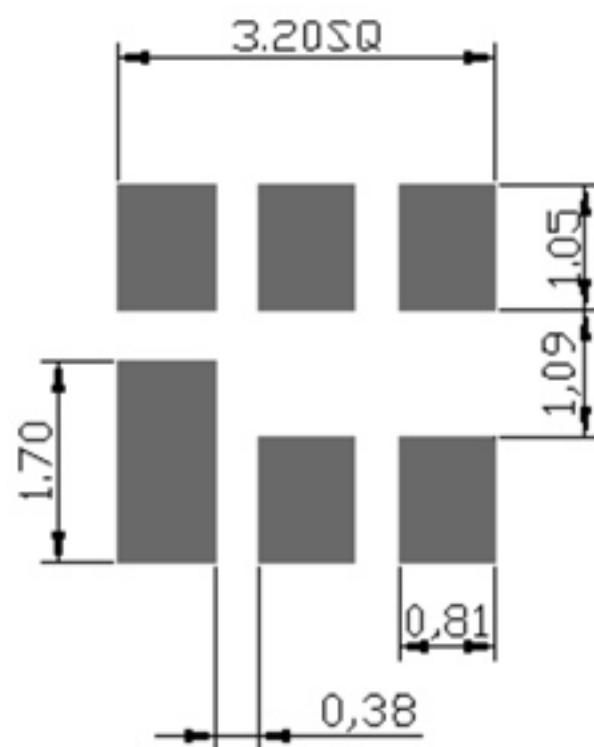
**△ : Year Code (2020->0, 2021->1, ..., 2029->9, 2030->0)**

**□ : Date Code**

**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.

