

# SAW Filter 1642.5 MHz

MODEL NO.:TA1307A

REV. NO.:2

## A. MAXIMUM RATING:

1. Input Power Level: 12 dBm
2. DC Voltage : 3V
3. Operating Temperature: -20 °C to +75 °C
4. Storage Temperature: -40 °C to +85 °C
5. Moisture Sensitivity Level: Level 1 (MSL 1)
6. ESD 50V(MM) 100V(HBM)

RoHS Compliant  
Lead free  
Lead-free soldering

Electrostatic Sensitive Device (ESD)

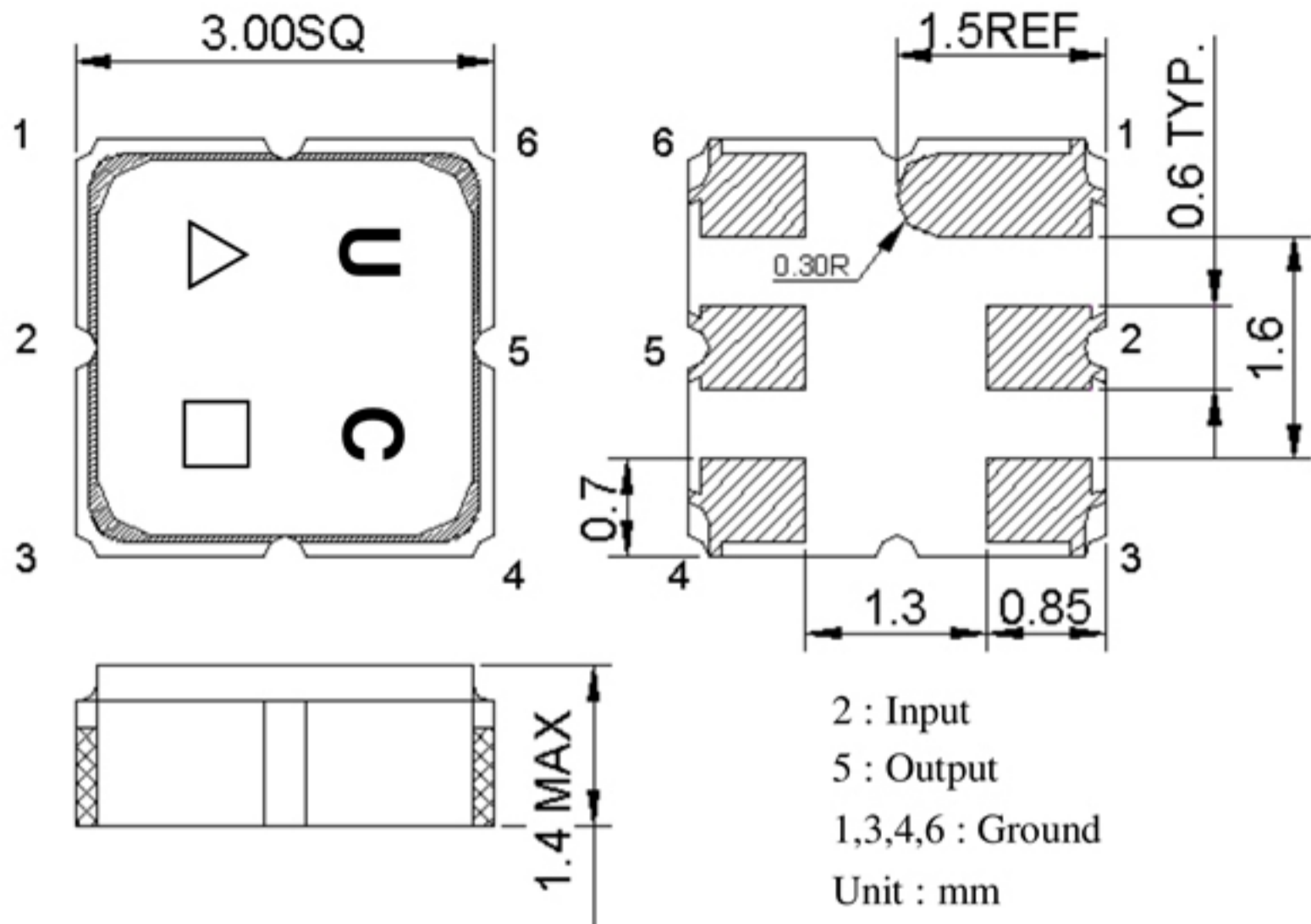
## B. ELECTRICAL CHARACTERISTICS:

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

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

Item	Unit	Min.	Typ.	Max.	Note
<b>Center Frequency</b> $F_c$	MHz	-	1642.5	-	-
<b>Insertion Loss</b> (1625 ~ 1660 MHz)	dB	-	1.8	3.5	-
<b>Amplitude ripple</b> (1625 ~ 1660 MHz)	dB	-	0.7	2	-
<b>VSWR</b> (1625 ~ 1660 MHz)		-	1.7	2.3	-
<b>Attenuation</b> (reference level from 0 dB)					
DC ~ 1500 MHz	dB	21	29	-	-
1525 ~ 1559 MHz	dB	30	36	-	-
1700 ~ 2050 MHz	dB	30	32	-	-
2050 ~ 3500 MHz	dB	25	32	-	-
<b>Temperature Coefficient of Frequency</b>	ppm/°C	-	-36	-	-

**C.OUTLINE DRAWING:**



△ : Year Code (2019->9, 2020->0, ..., 2028->8)

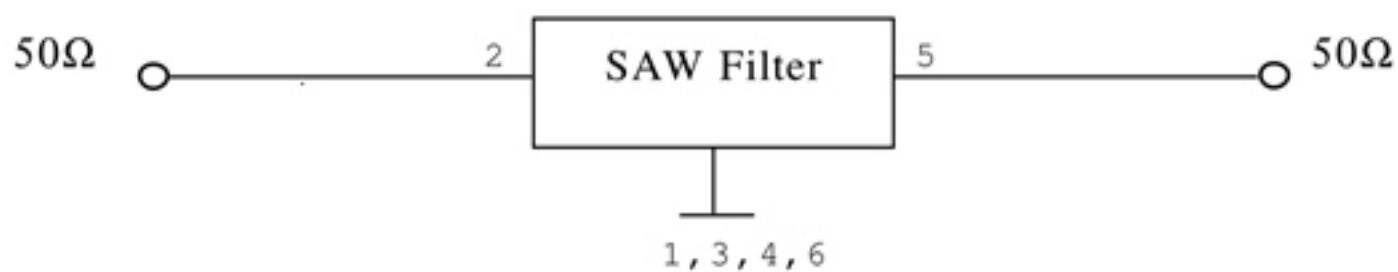
□ : Date Code (W01->A, W02->B, ..., W27->a, ..., W52->z)

Date Code Table

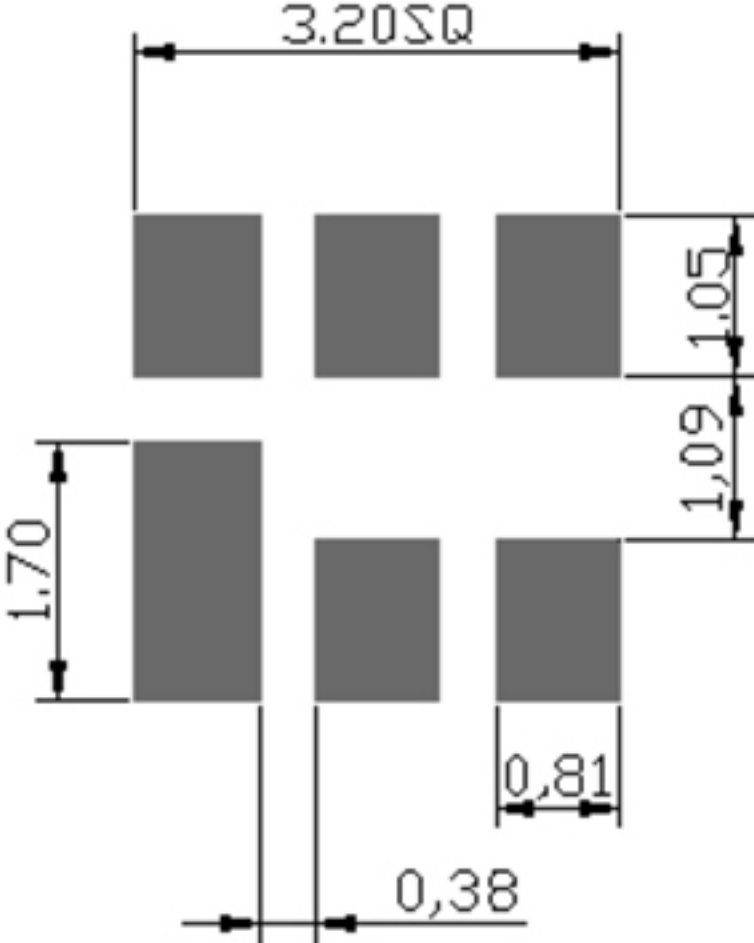
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45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

**D. MEASUREMENT CIRCUIT:**

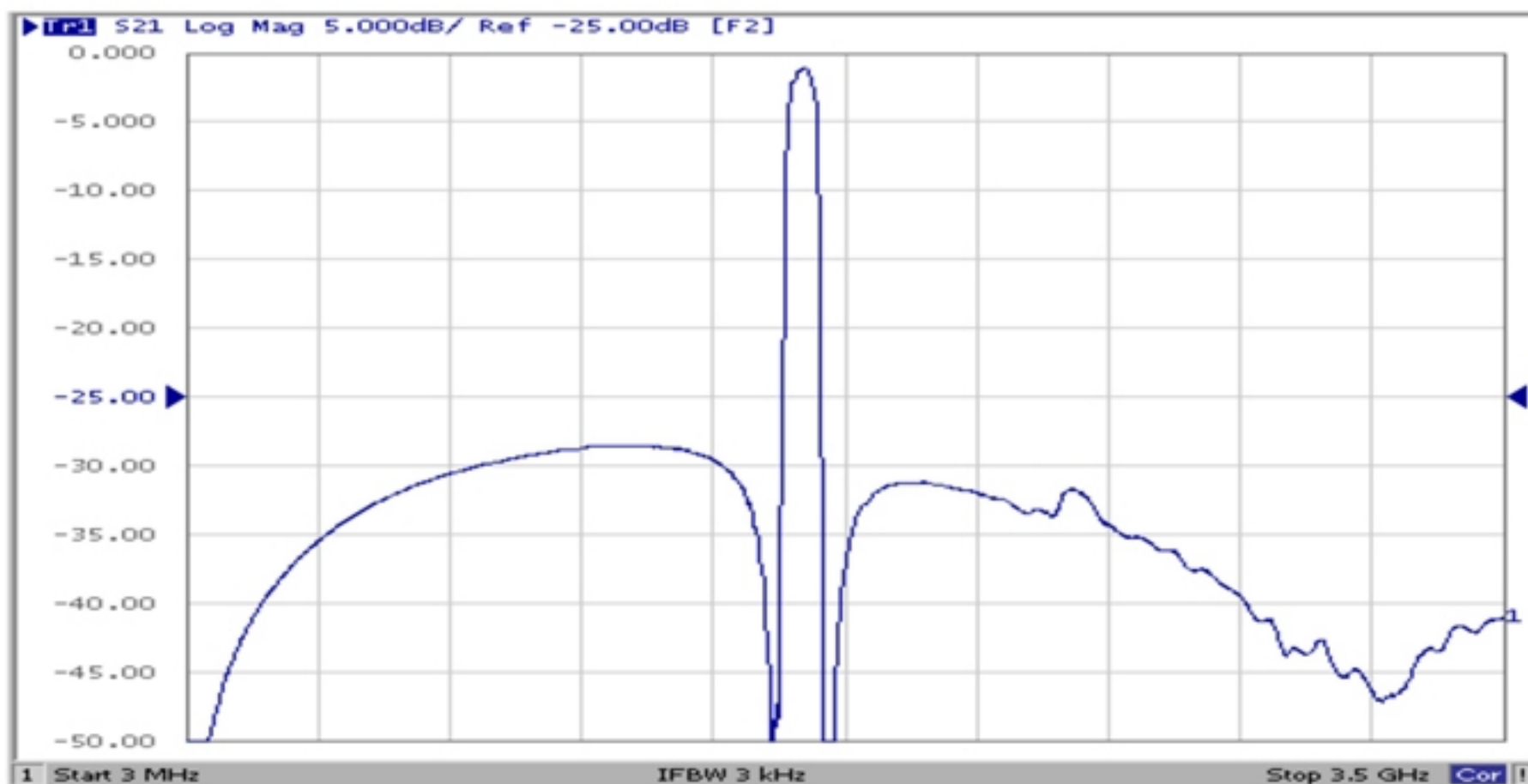
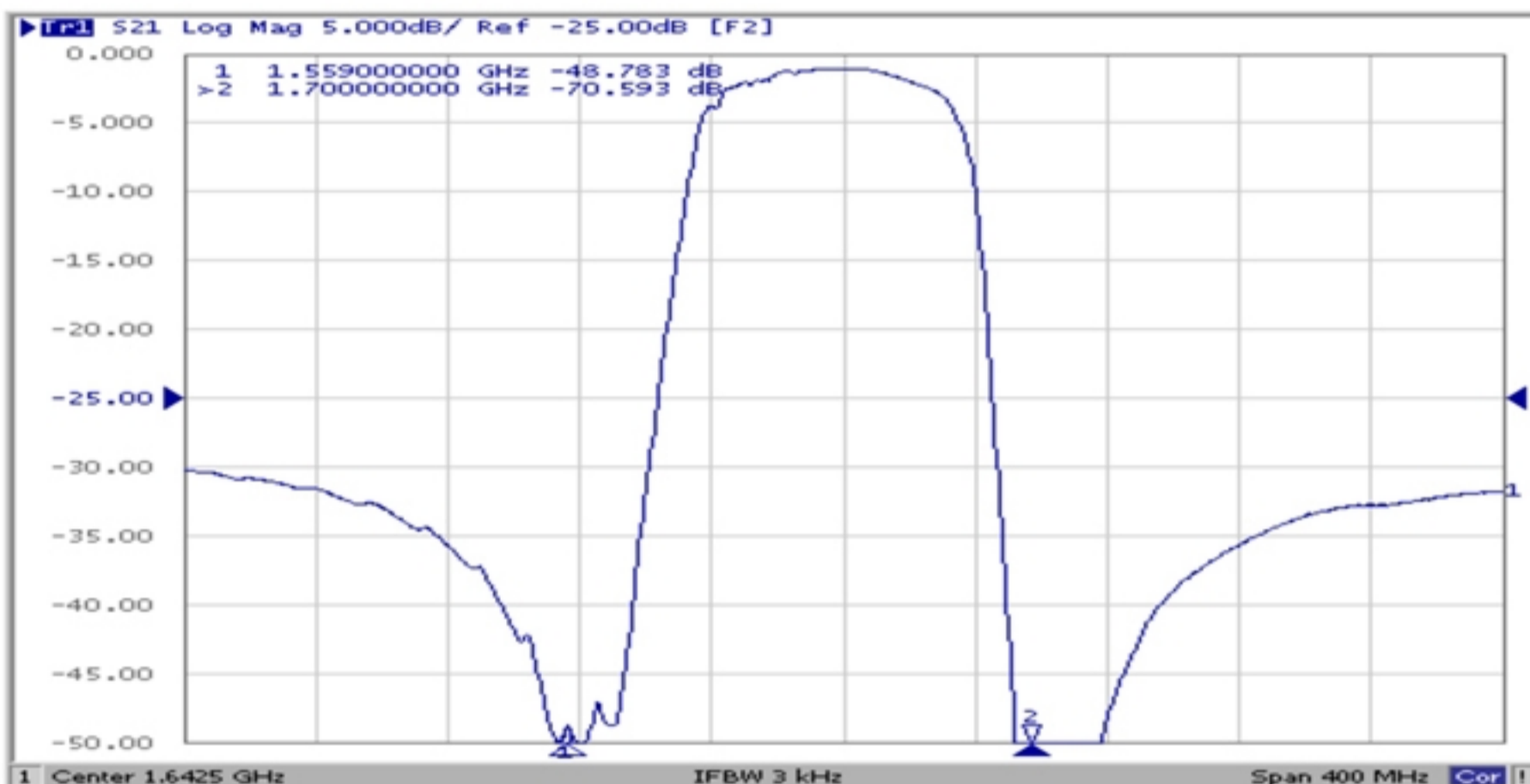
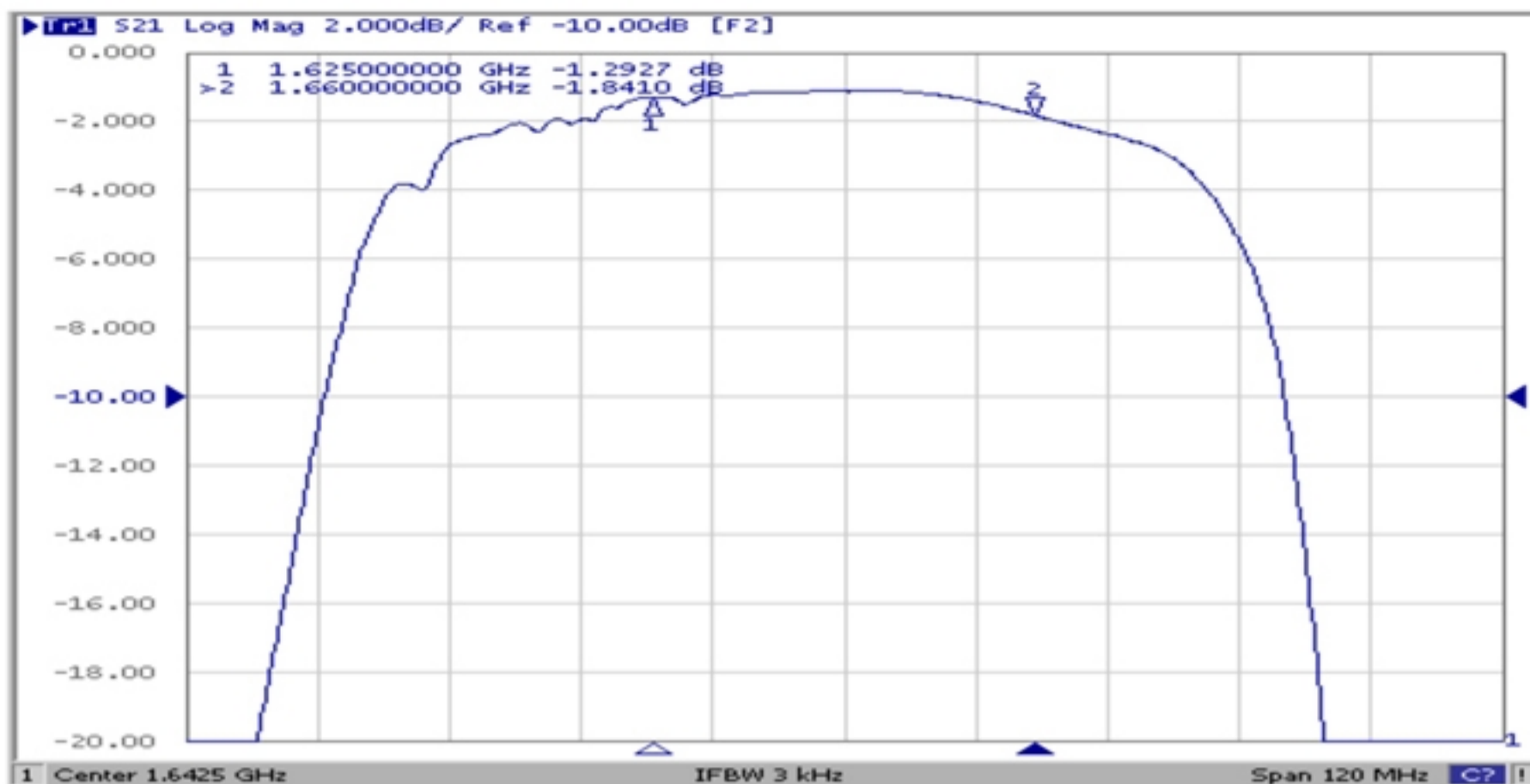
HP Network analyzer



E. PCB Footprint:

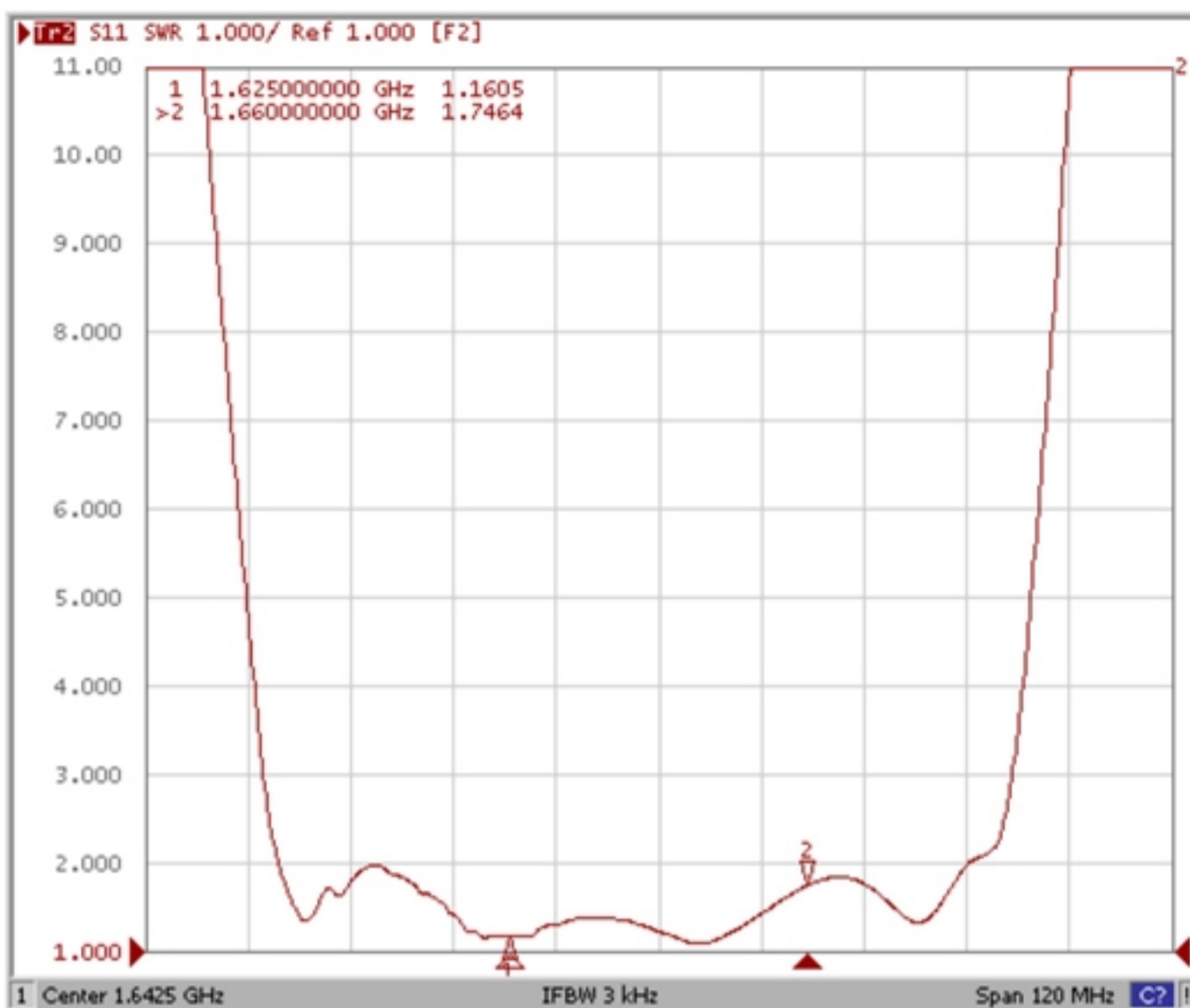


## F. Frequency Characteristics :

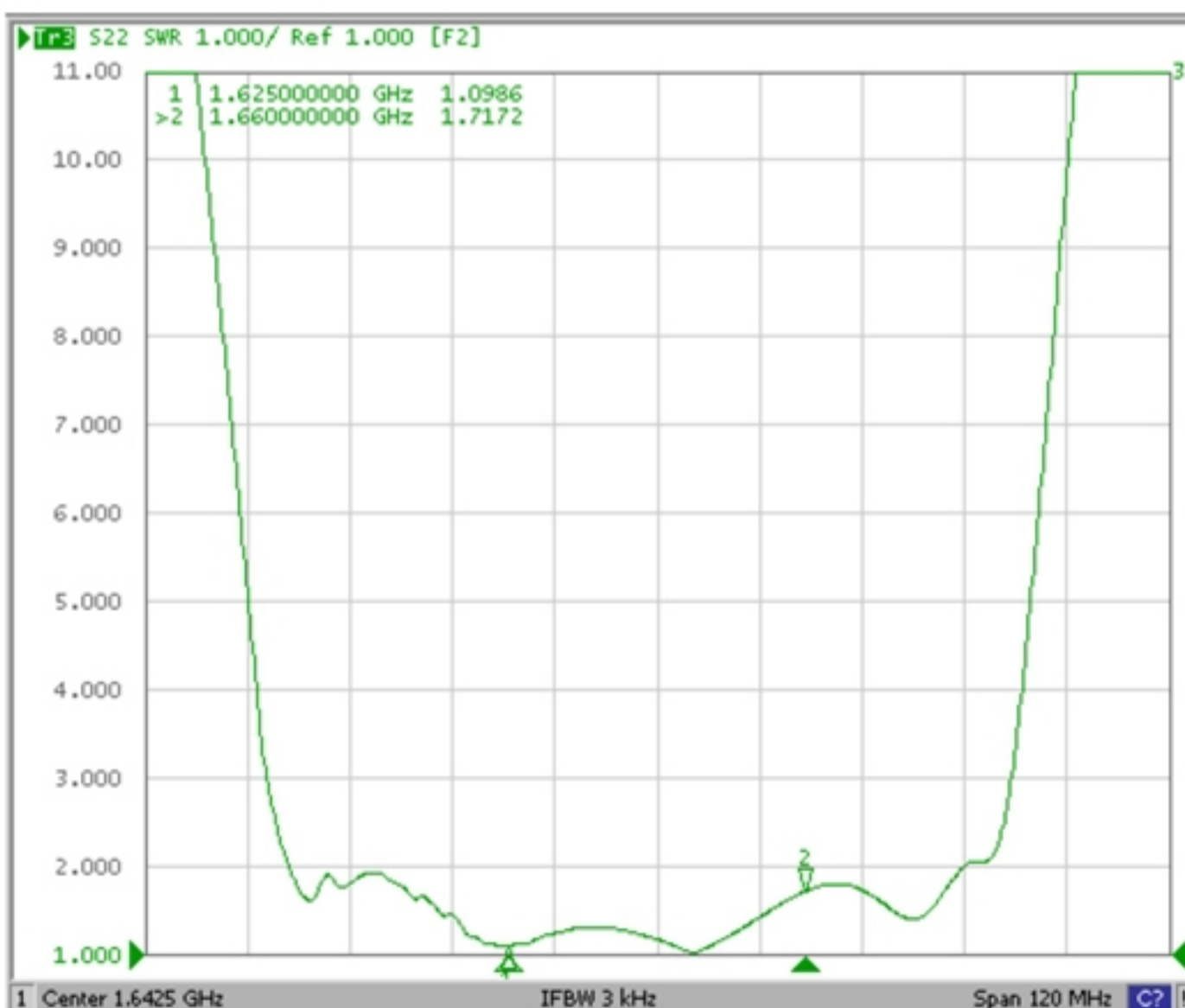


# Reflection Functions :

## S11



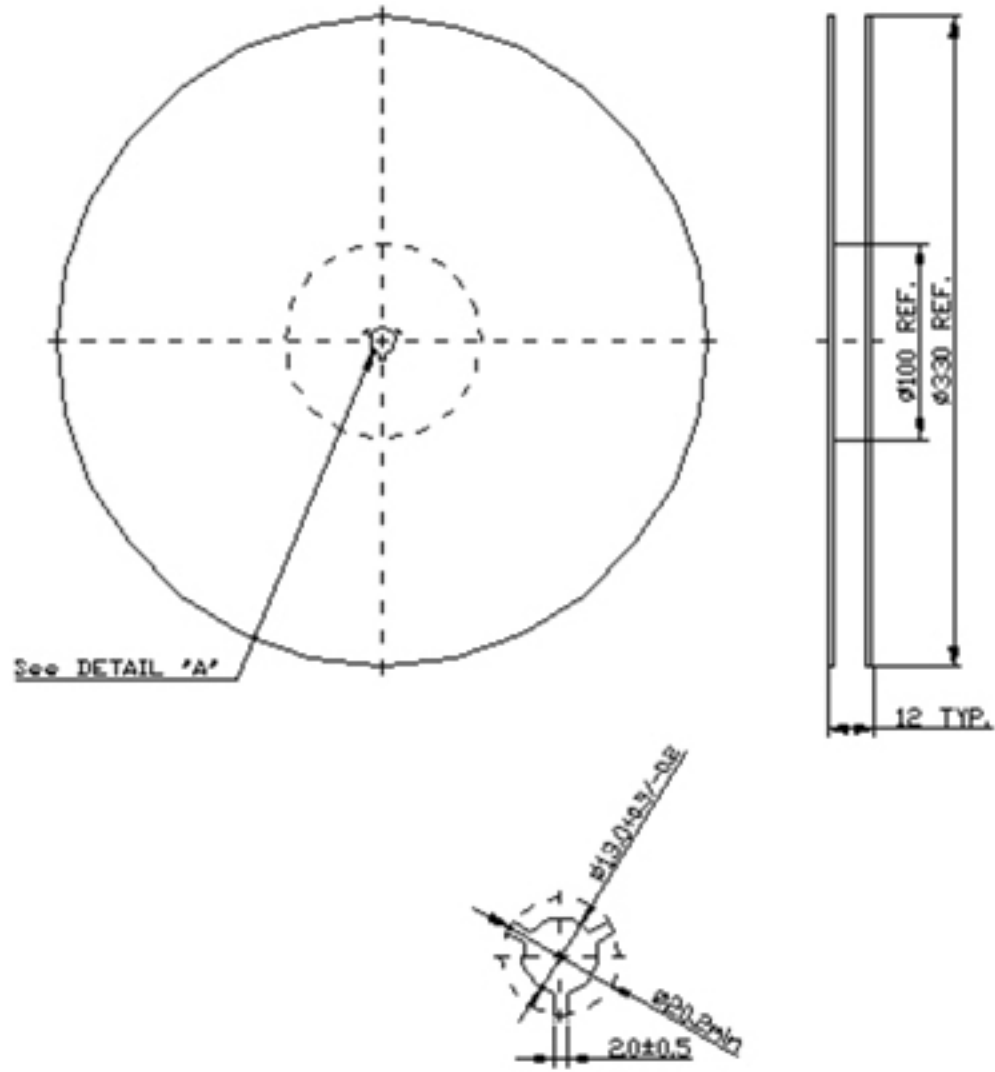
## S22



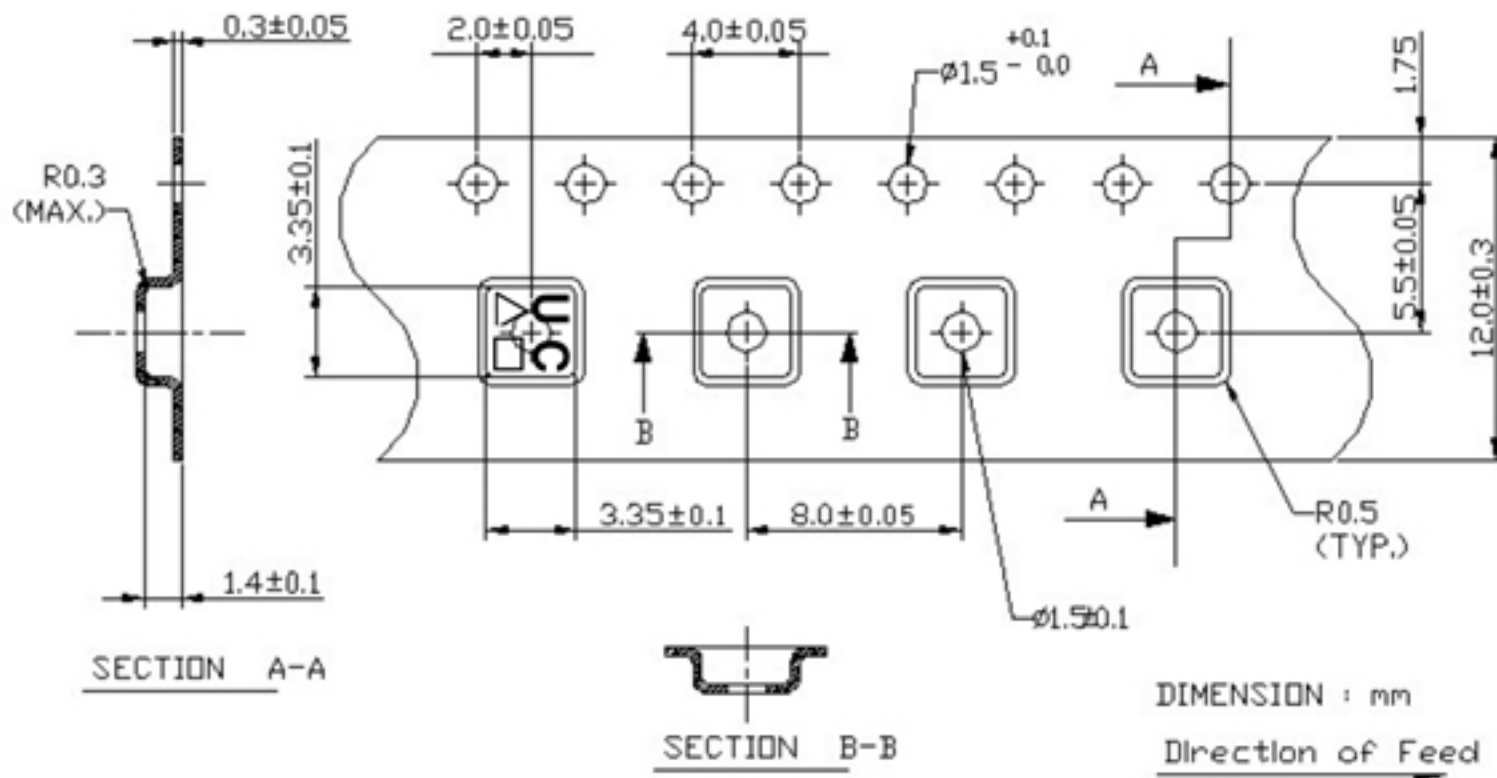
**G. PACKING:**

**1. REEL DIMENSION**

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



**2. TAPE DIMENSION**



## H. RECOMMENDED REFLOW PROFILE :

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

