

SAW Filter 707.5 MHz

MODEL NO.: TA2438B

REV.2.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm (In passband)
2. DC Voltage: +/-5 V
3. Operating Temperature: -40 °C to +85 °C
4. Storage Temperature: -40 °C to +100 °C
5. Moisture Sensitive Level: Level 1 (MSL1)
6. ESD: 100 V(MM), 200 V(HBM)

RoHS Compliant
Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

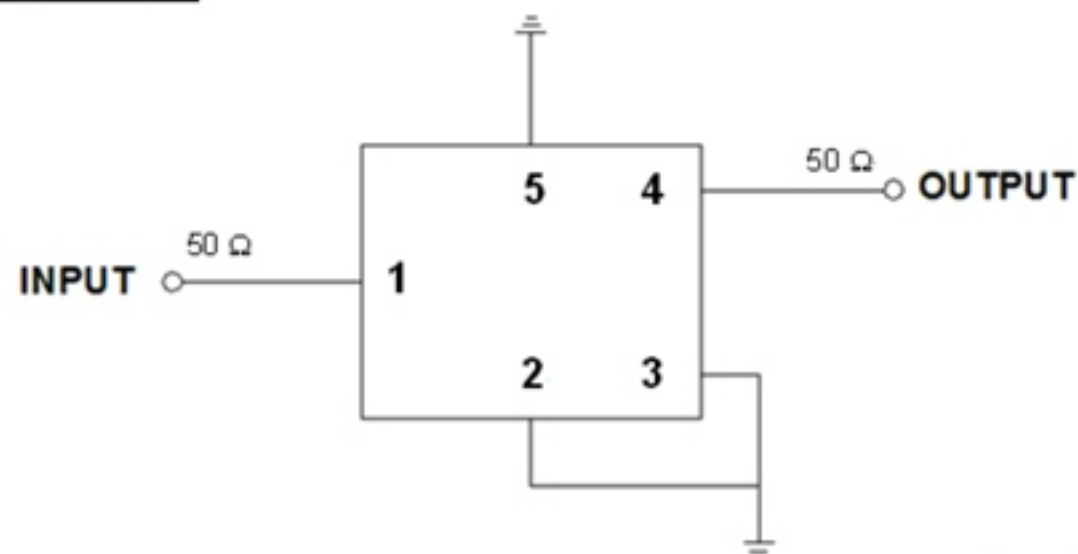
Terminating source impedance: $Z_s=50 \Omega$

Terminating load impedance: $Z_L=50 \Omega$

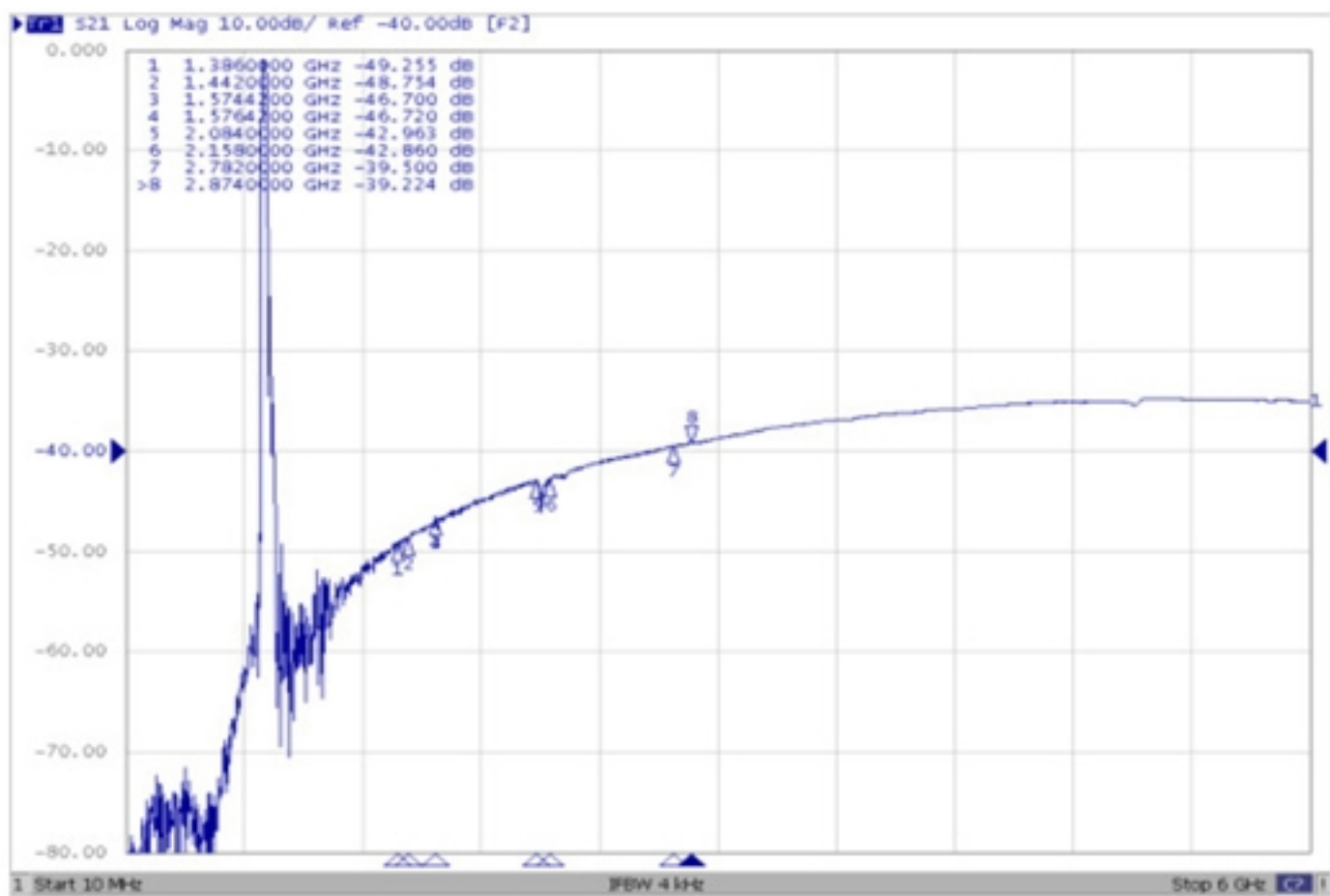
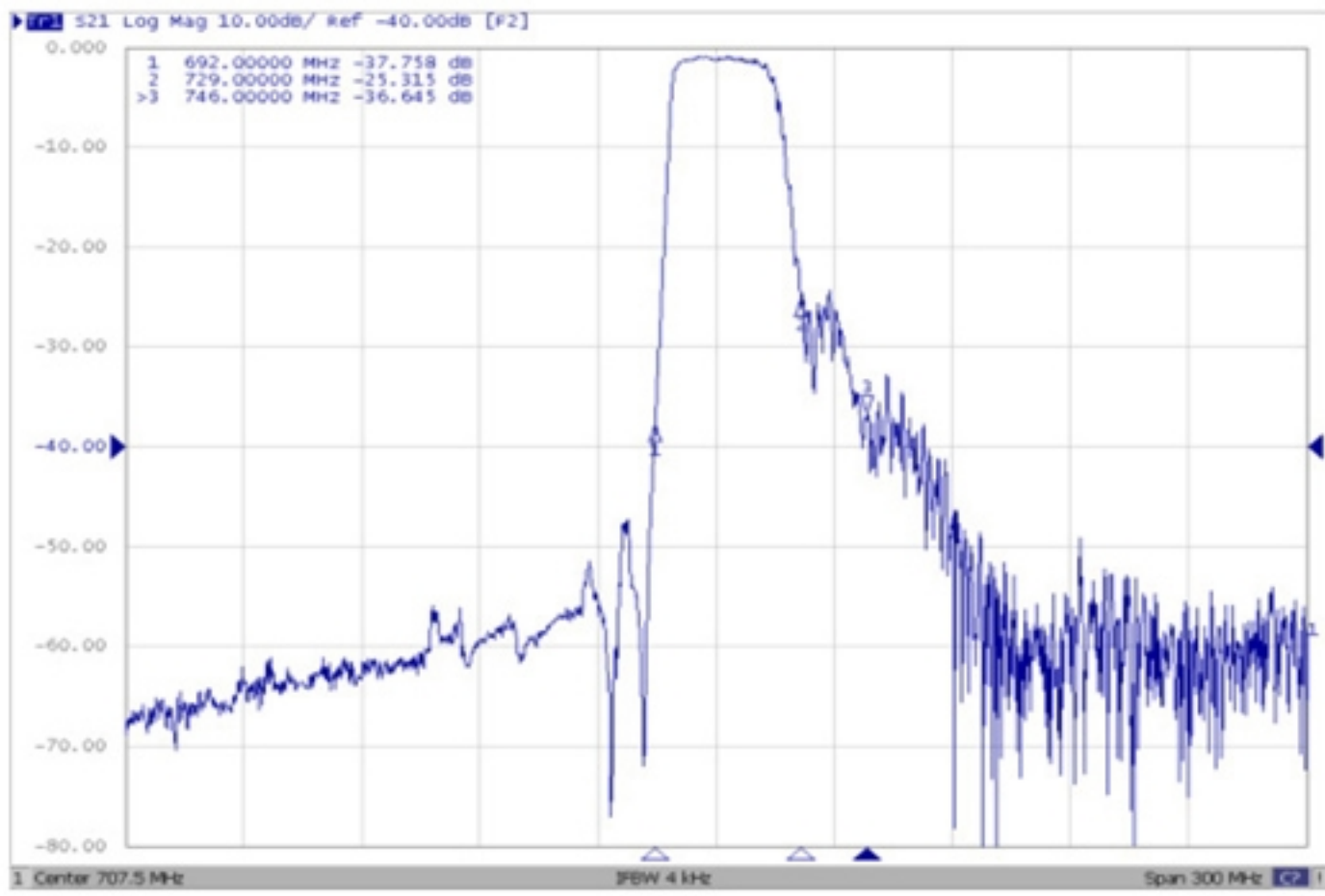
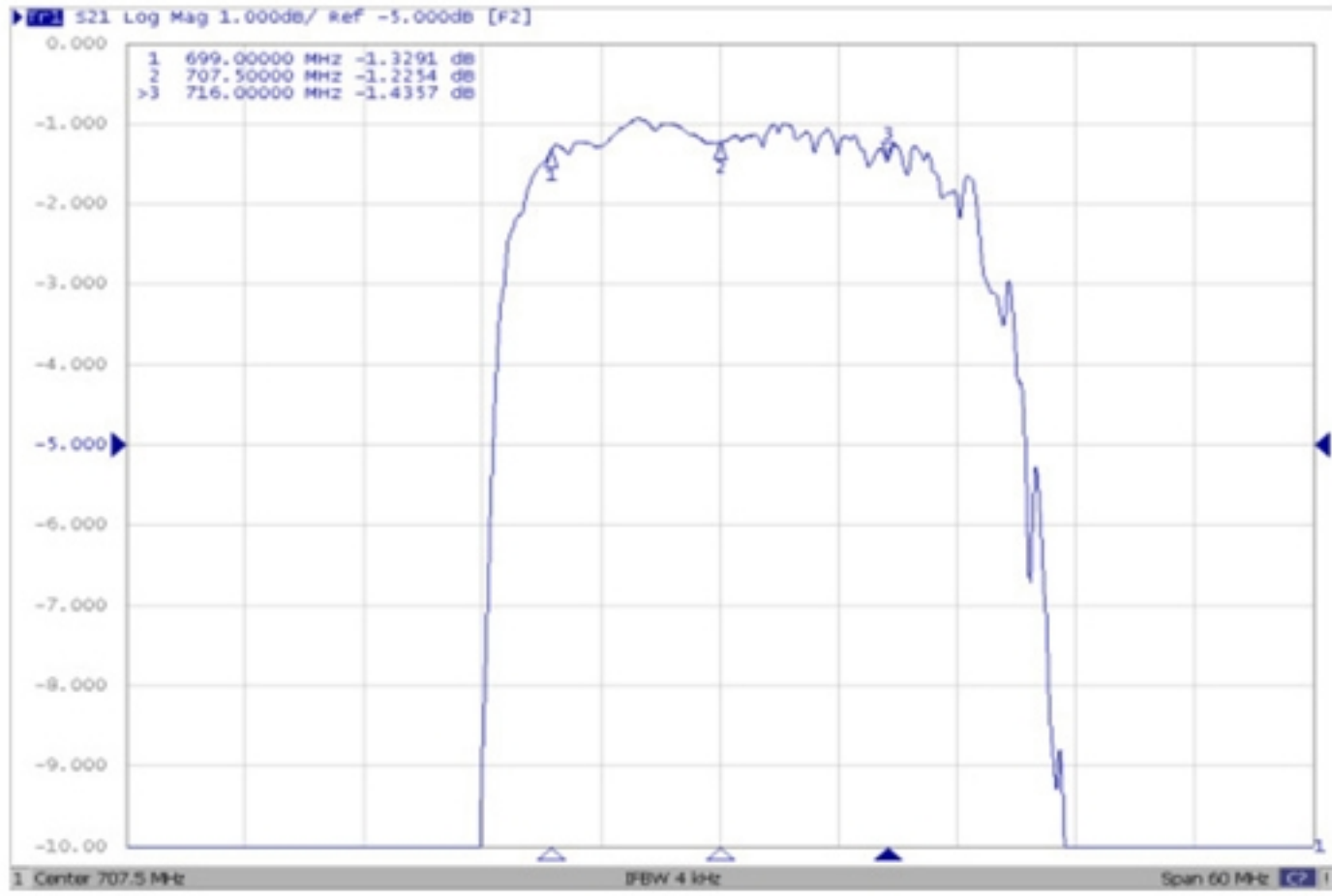
Item	Unit	Min.	Typ.	Max.	
Center Frequency	Fc	MHz	-	707.5	-
Insertion Loss (699~716 MHz)	IL	dB(*1)	-	1.6	2.5
Amplitude Ripple (699~716 MHz)		dB	-	0.6	1.7
VSWR (699~716 MHz)		-	-	1.7	2.1
Attenuation (Reference level from 0 dB)					
1 ~ 692 MHz	dB	18	37	-	
729 ~ 746 MHz	dB	13	23	-	
1386 ~ 1442 MHz	dB	40	47	-	
1574.42 ~ 1576.42 MHz	dB	38	46	-	
2084 ~ 2158 MHz	dB	30	42	-	
2782 ~ 2874 MHz	dB	25	39	-	

(*1) Specification of insertion loss excludes loss that comes from the test board.

C. MEASUREMENT CIRCUIT:

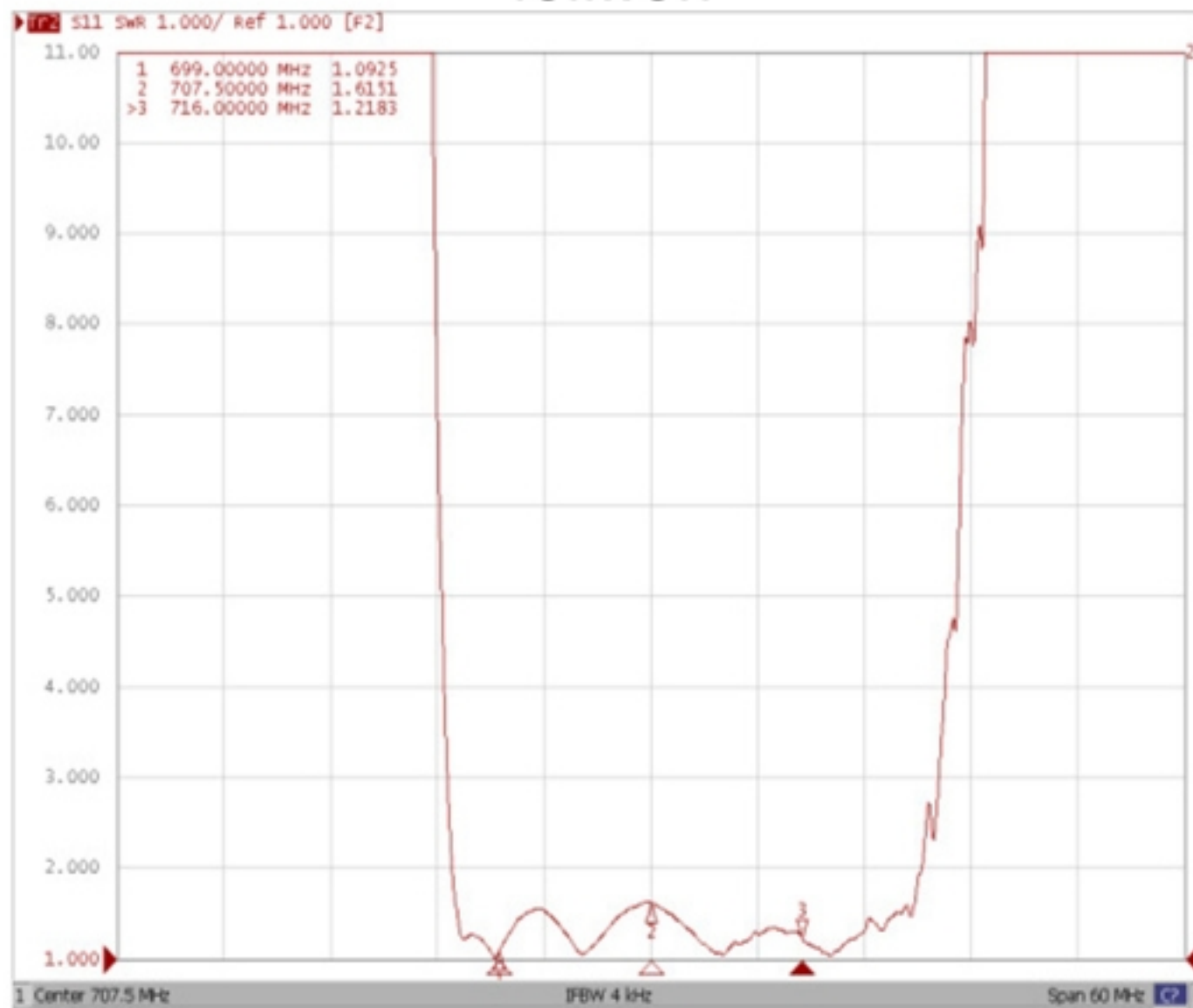


D. FREQUENCY CHARACTERISTIC:

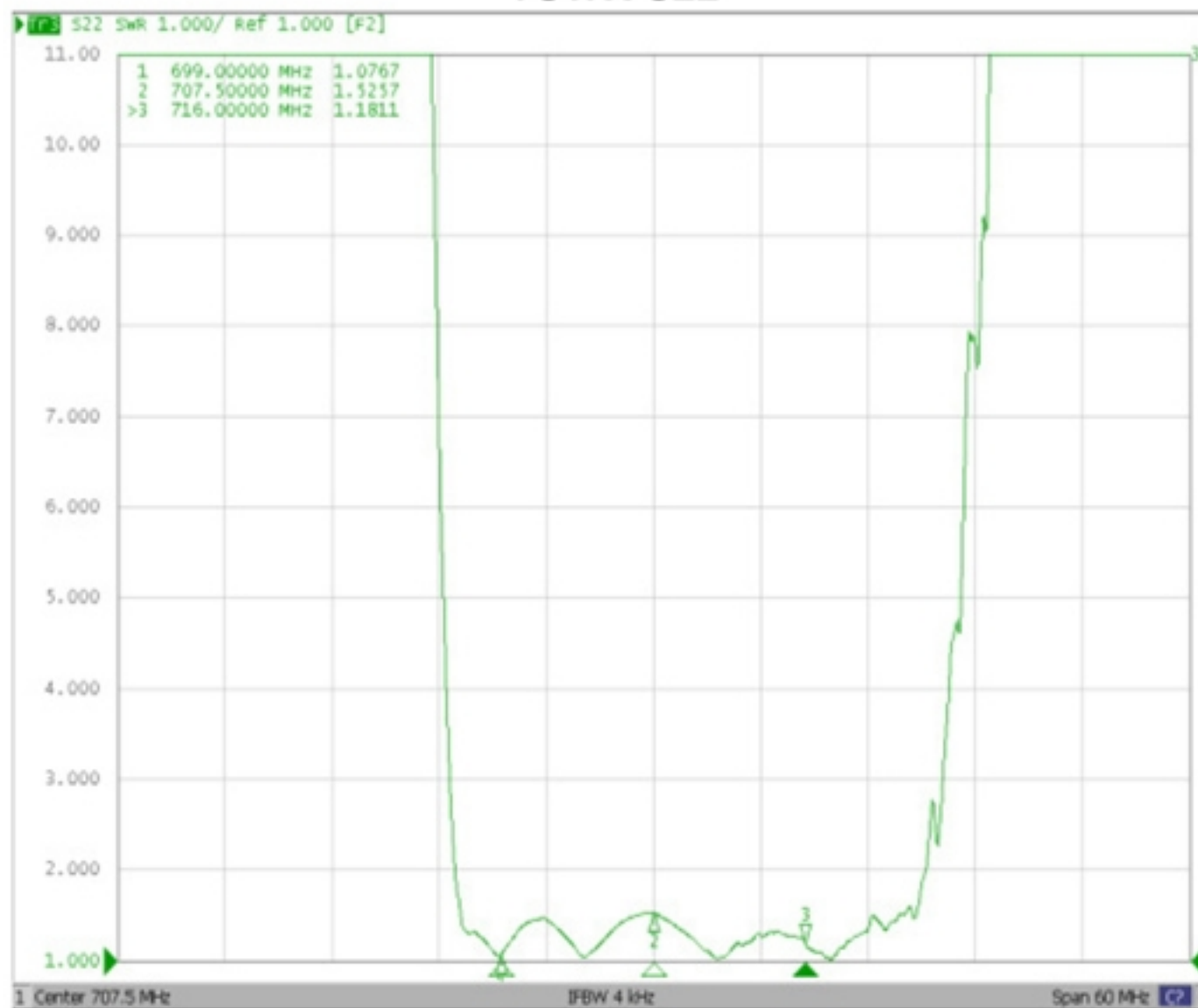


Reflection Functions:

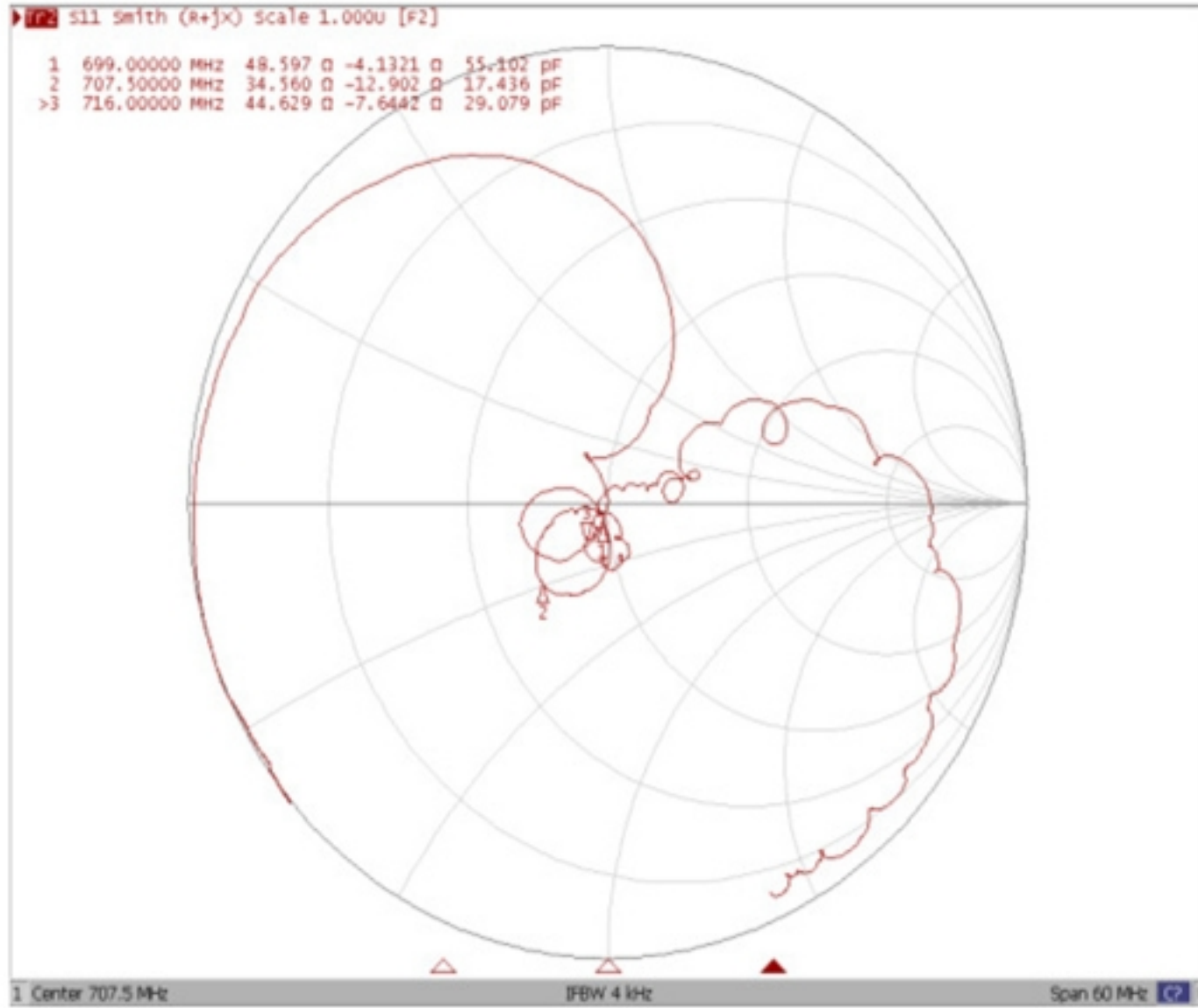
VSWR S11



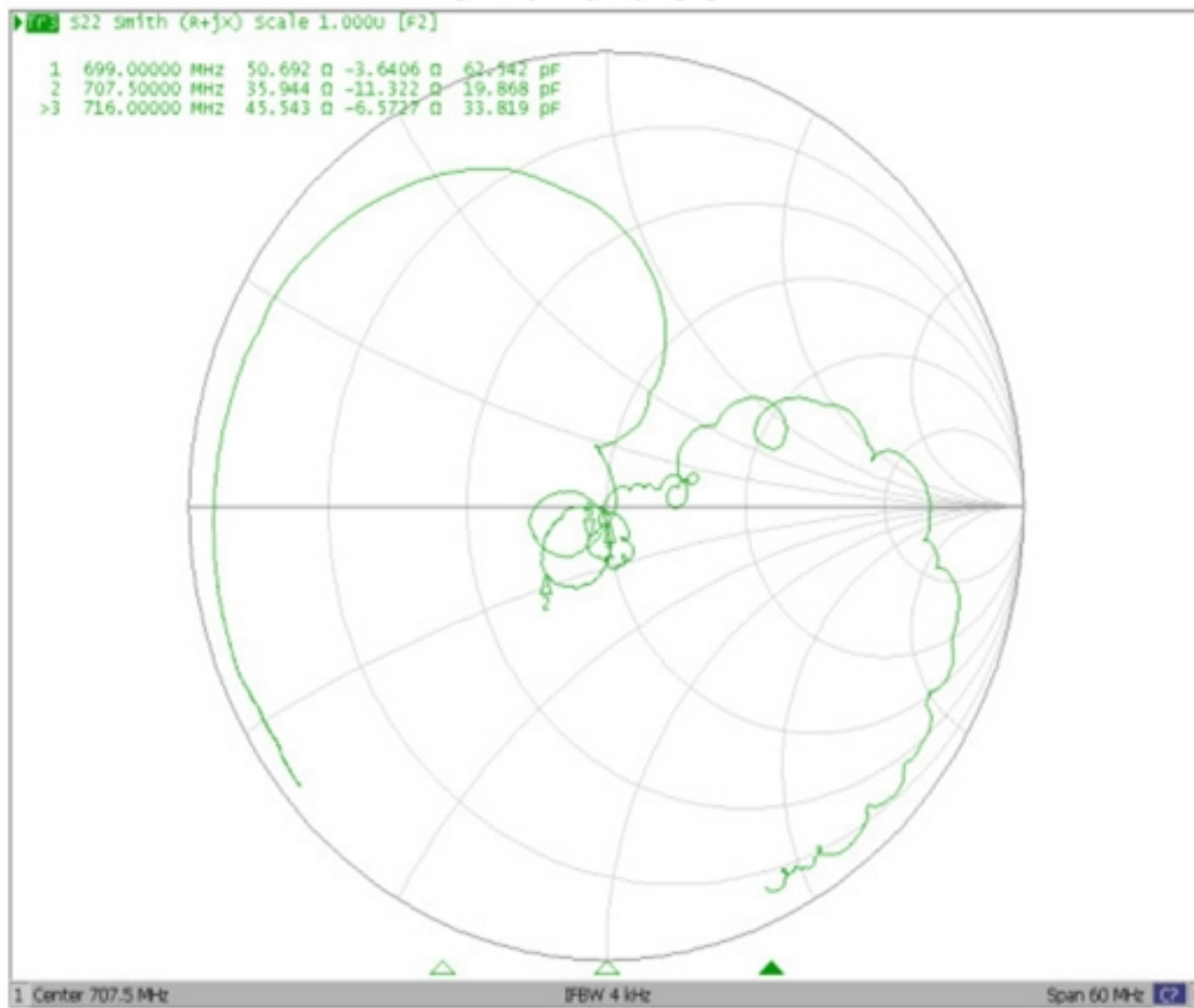
VSWR S22



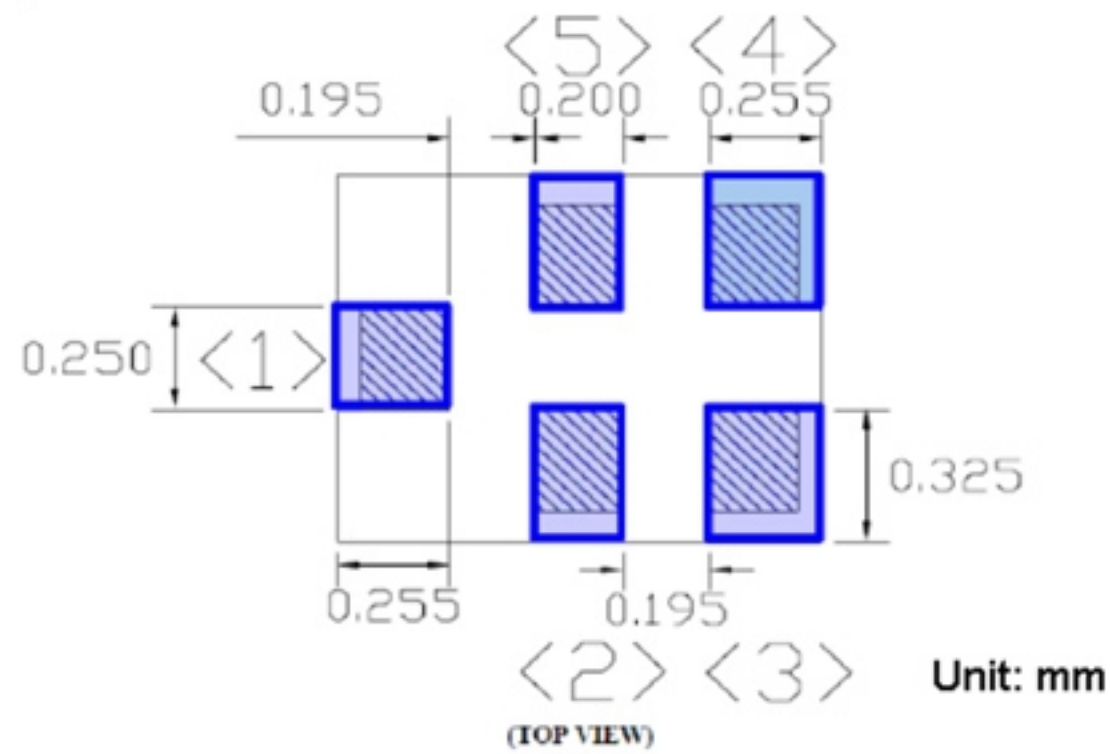
Smith Chart S11



Smith Chart S22

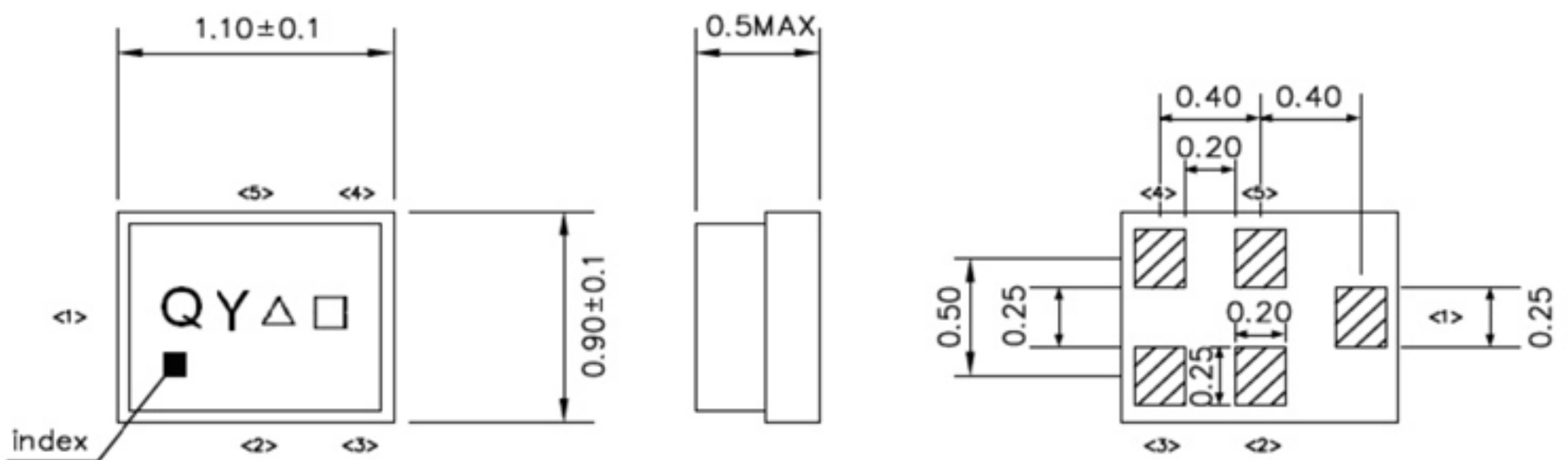


E. PCB FOOTPRINT:



F. OUTLINE DRAWING:

Device size: 1.1typ. x 0.9typ. x 0.5max.



All tolerances are +/-0.1 mm unless otherwise specified.
Unit: mm

Pin Configuration

Pin No.	Symbol	Function
1	IN	Unbalanced pin
2	GND	Ground
3	GND	Ground
4	OUT	Unbalanced pin
5	GND	Ground

△ : Date Code

□ : Lot No. (Indicated by 0~9 or A to Z and a to z, except I, O, i, o and l)

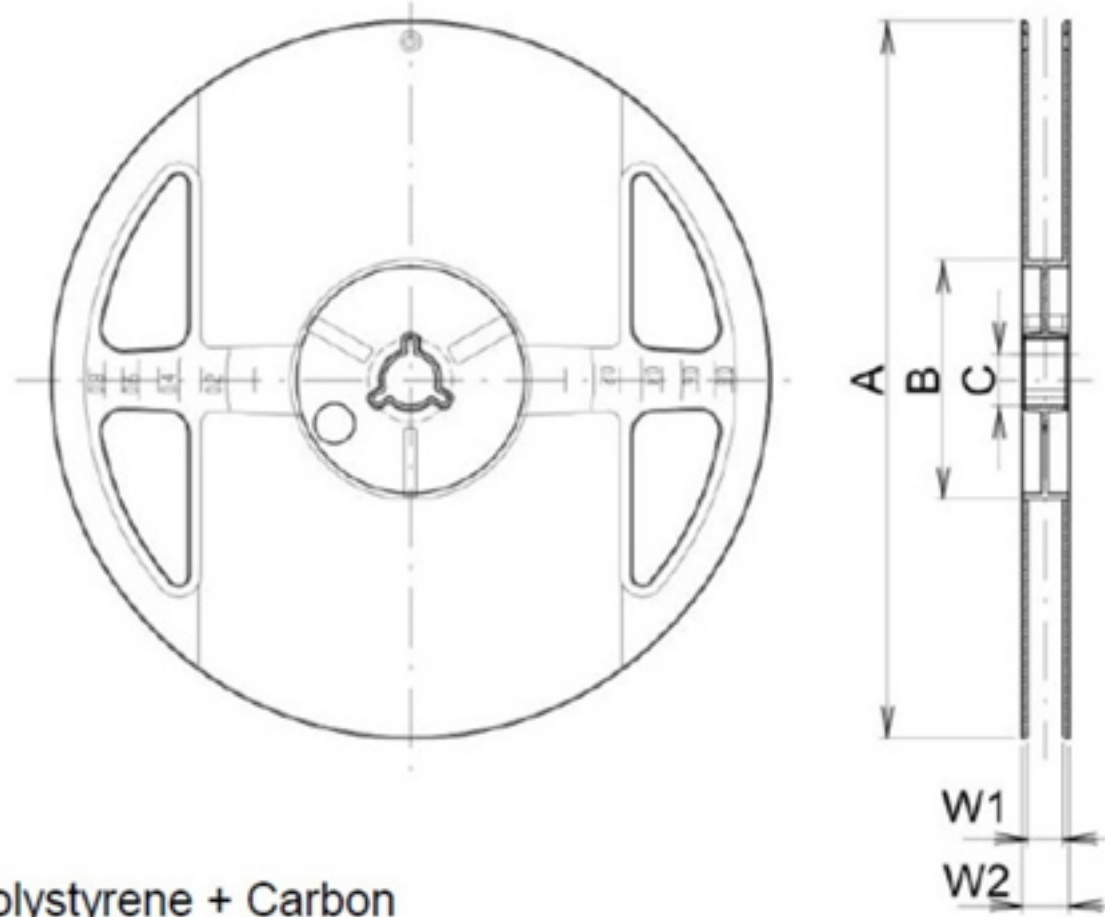
Date Code:

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2020	n	p	q	r	s	t	u	v	w	x	y	z
2021	A	B	C	∅	E	F	G	H	J	K	L	M
2022	N	P	Q	R	S	T	U	V	W	X	Y	Z
2023	a	b	c	d	e	f	g	h	j	k	l	m

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

1. REEL DIMENSION

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



Material : Polystyrene + Carbon

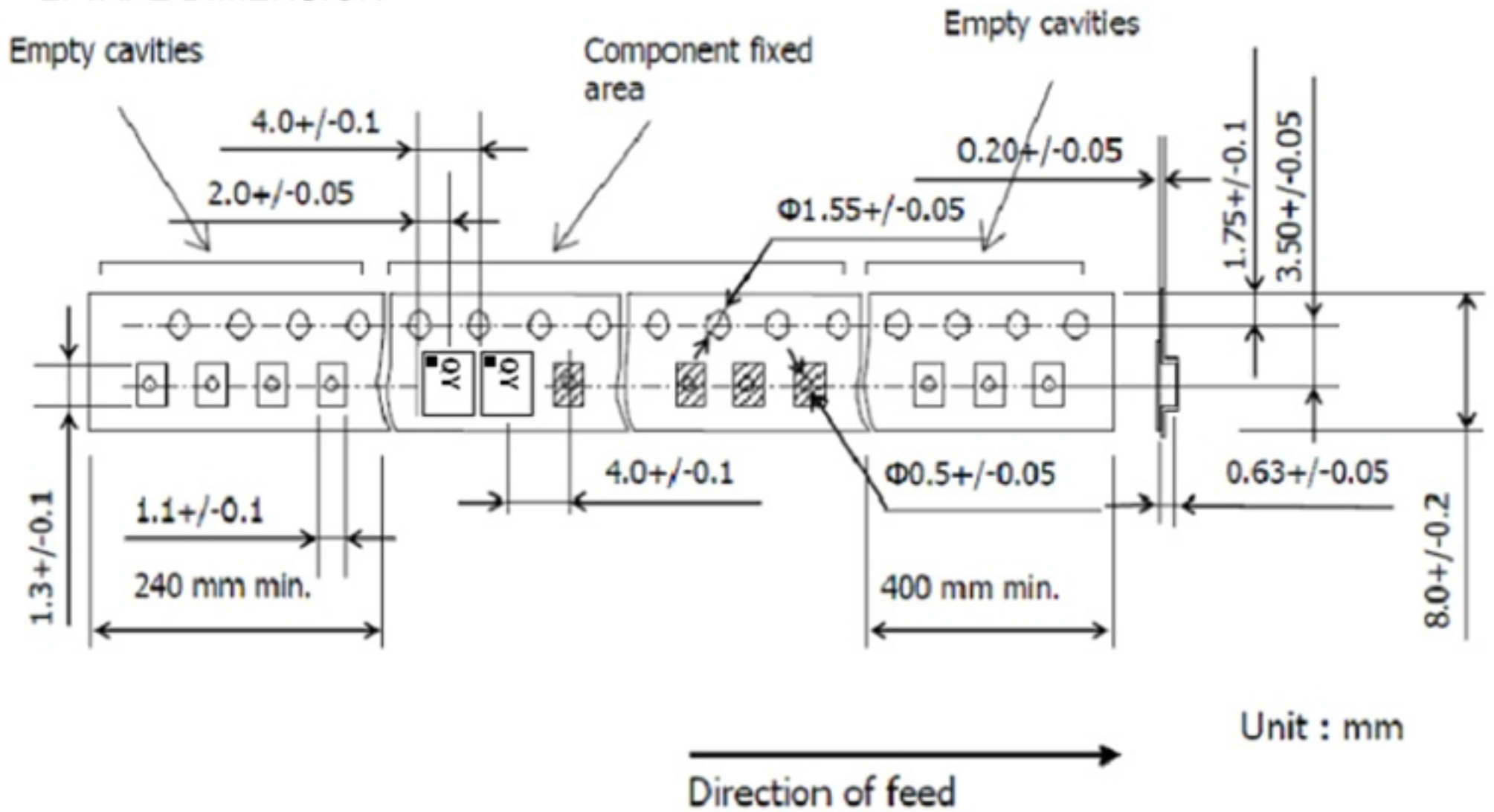
Color : Black

Surface resistance (reference value) : $10^9 \Omega/\text{sq}$ max.

Unit : mm

A	B	C	W1	W2
180.0 +0.0/-1.5	60.0 +1.0/-0.0	13.0 ±0.2	9.0 +1.0/-0.0	11.4 ±1.0

2. TAPE DIMENSION



Unit : mm

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.

