

SAW Filter 1732.5 MHz

MODEL NO.: TA1872B

REV. No.: 2.0

A. MAXIMUM RATING:

1. Maximum Input Power: 10 dBm
2. DC voltage: +/-5 V
3. Operating Temperature: -40 °C to +85 °C
4. Storage Temperature: -40 °C to +85 °C
5. Moisture Sensitivity Level: Level 1 (MSL 1)
6. ESD: 50 V(MM), 100 V(HBM)

RoHS Compliant

Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

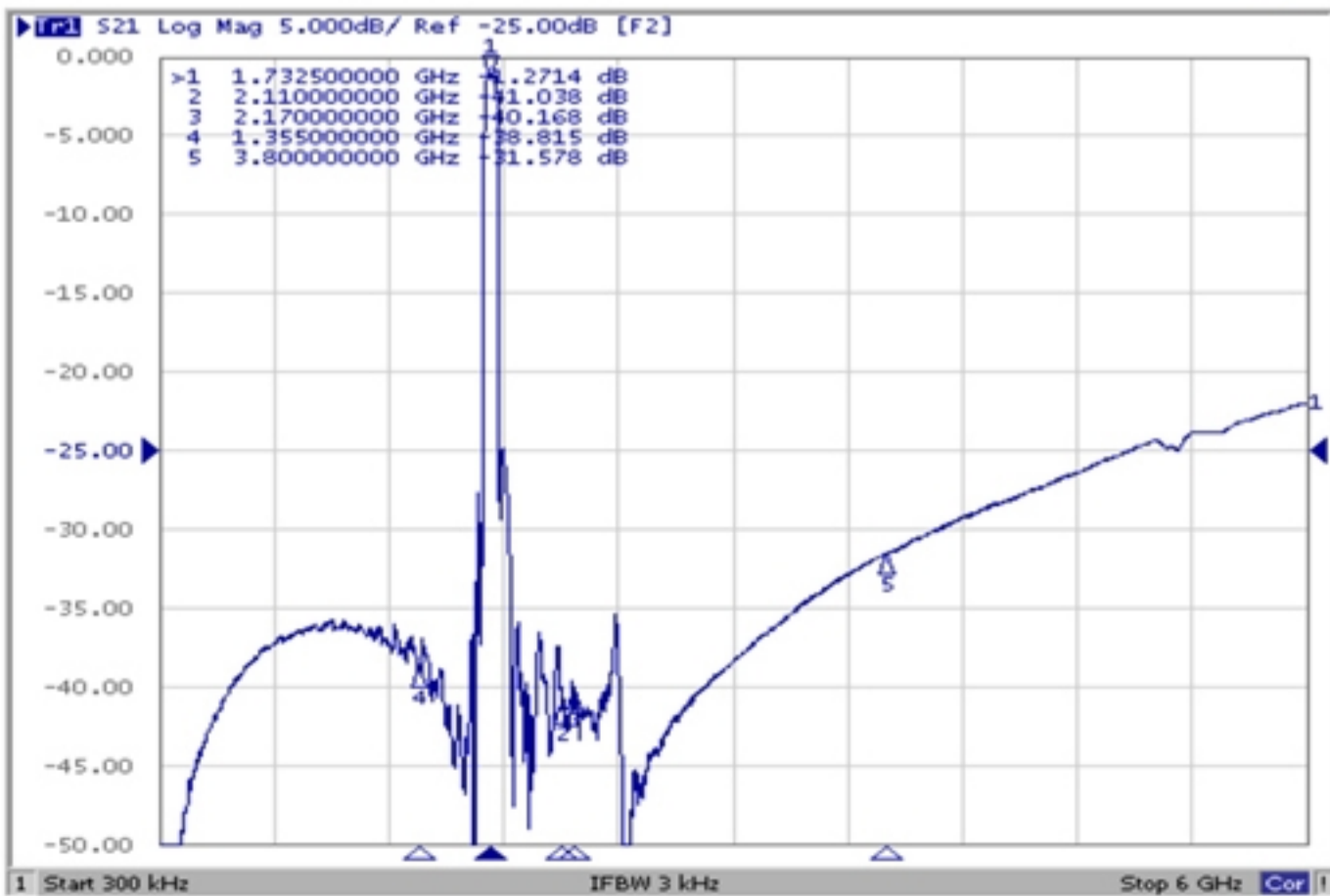
Terminating source impedance: $Z_s = 50 \Omega$ (Single-ended)

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

Parameters Description	Unit	Min.	Typ.	Max.
Center Frequency Fc	MHz	-	1732.5	-
Insertion Loss (1710~1755 MHz) IL	dB(*1)	-	1.7	2.2
Amplitude Ripple (1710~1755 MHz)	dB _{p-p}	-	0.7	1.4
VSWR (1710~1755 MHz)	-	-	1.7	2.2
Attenuation (Reference level from 0 dB)				
50 ~ 1355 MHz	dB	30	35	-
1574 ~ 1577 MHz	dB	30	40	-
1600 ~ 1680 MHz	dB	18	26	-
1805 ~ 1880 MHz	dB	19	24	-
1930 ~ 1990 MHz	dB	25	35	-
2110 ~ 2170 MHz	dB	34	37	-
2200 ~ 2700 MHz	dB	20	33	-
2700 ~ 3800 MHz	dB	20	29	-
3800 ~ 6000 MHz	dB	10	21	-

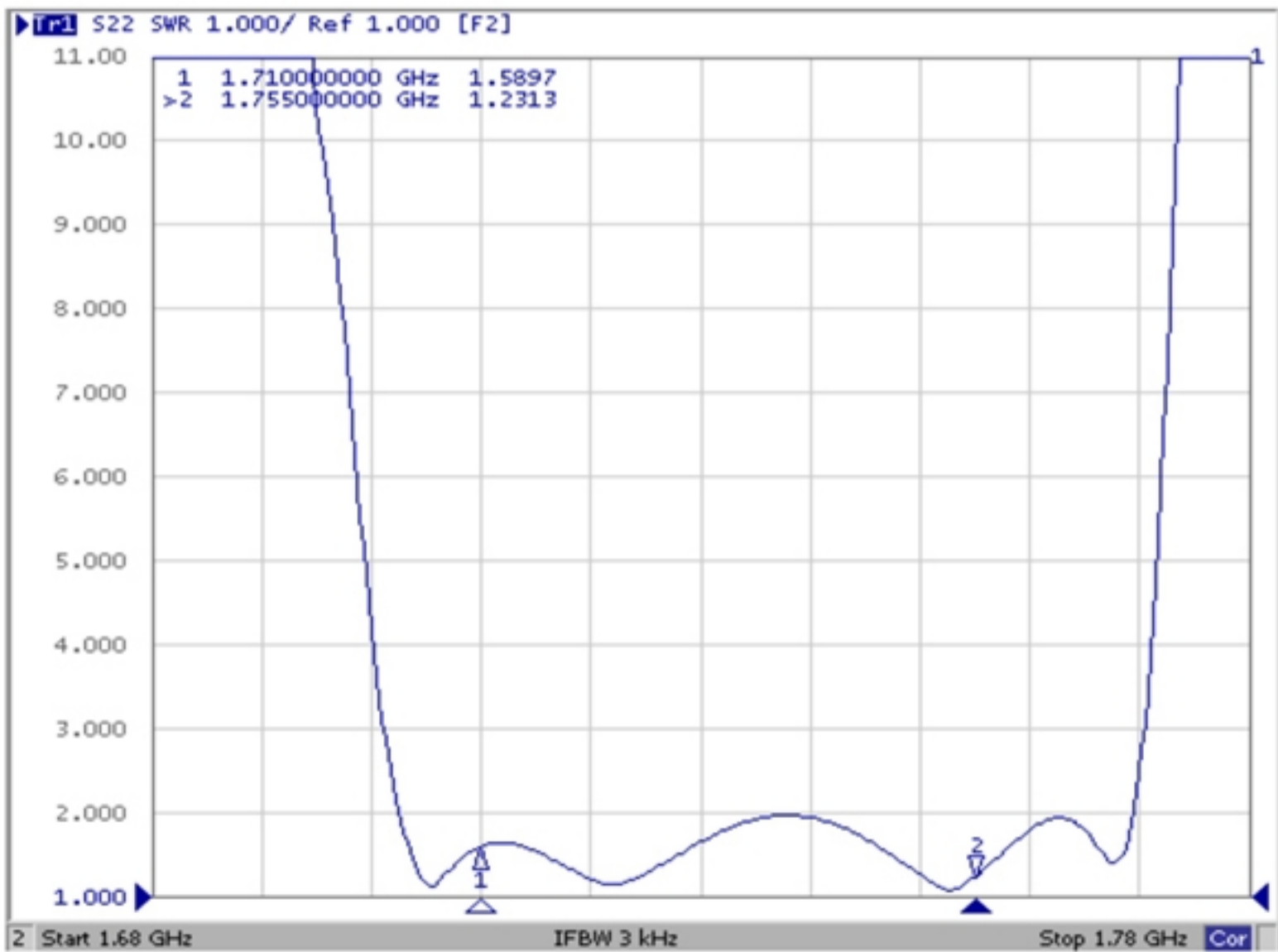
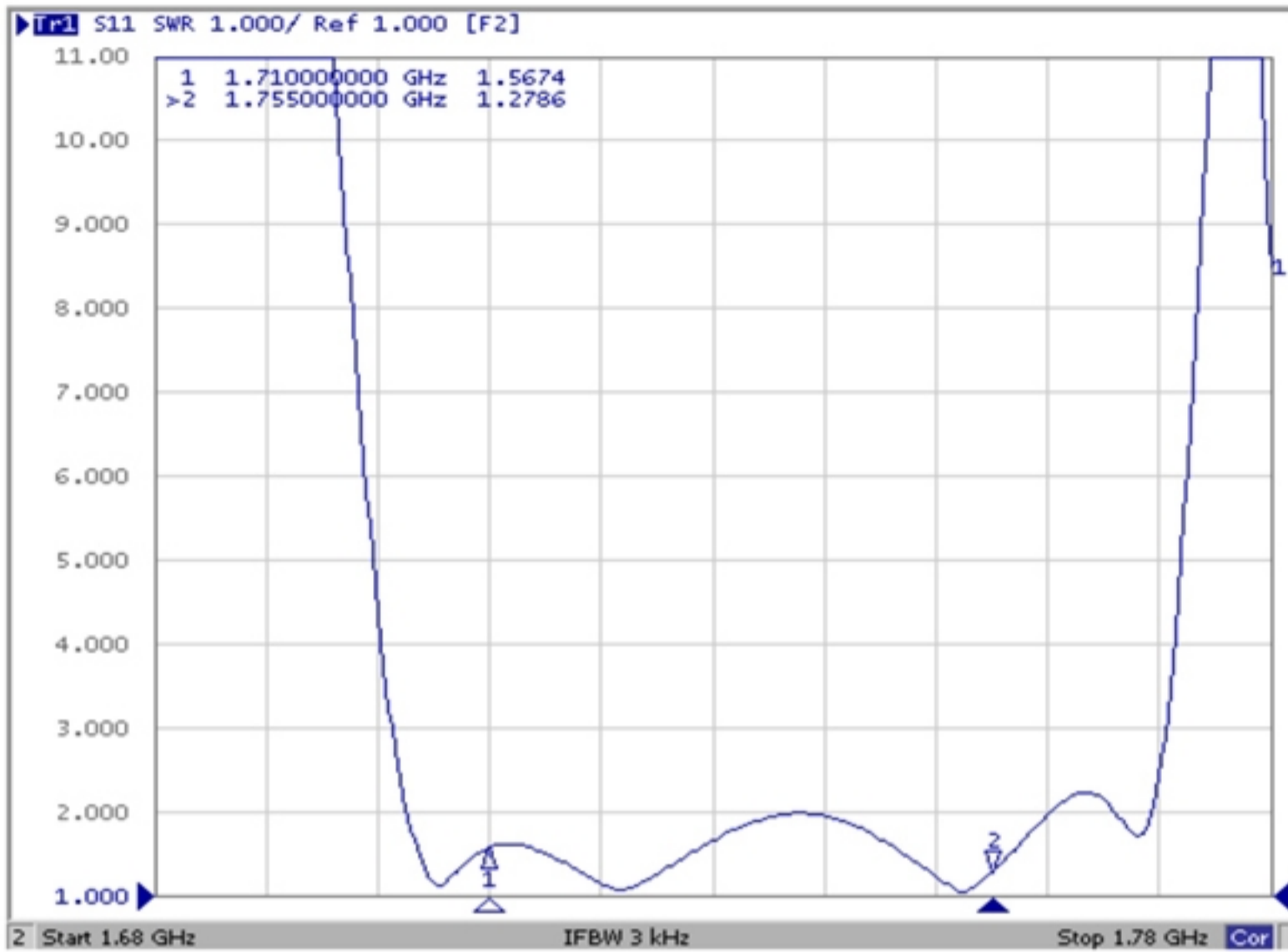
(*1) Specification of insertion loss includes loss that comes from the test board.

C. FREQUENCY CHARACTERISTIC:

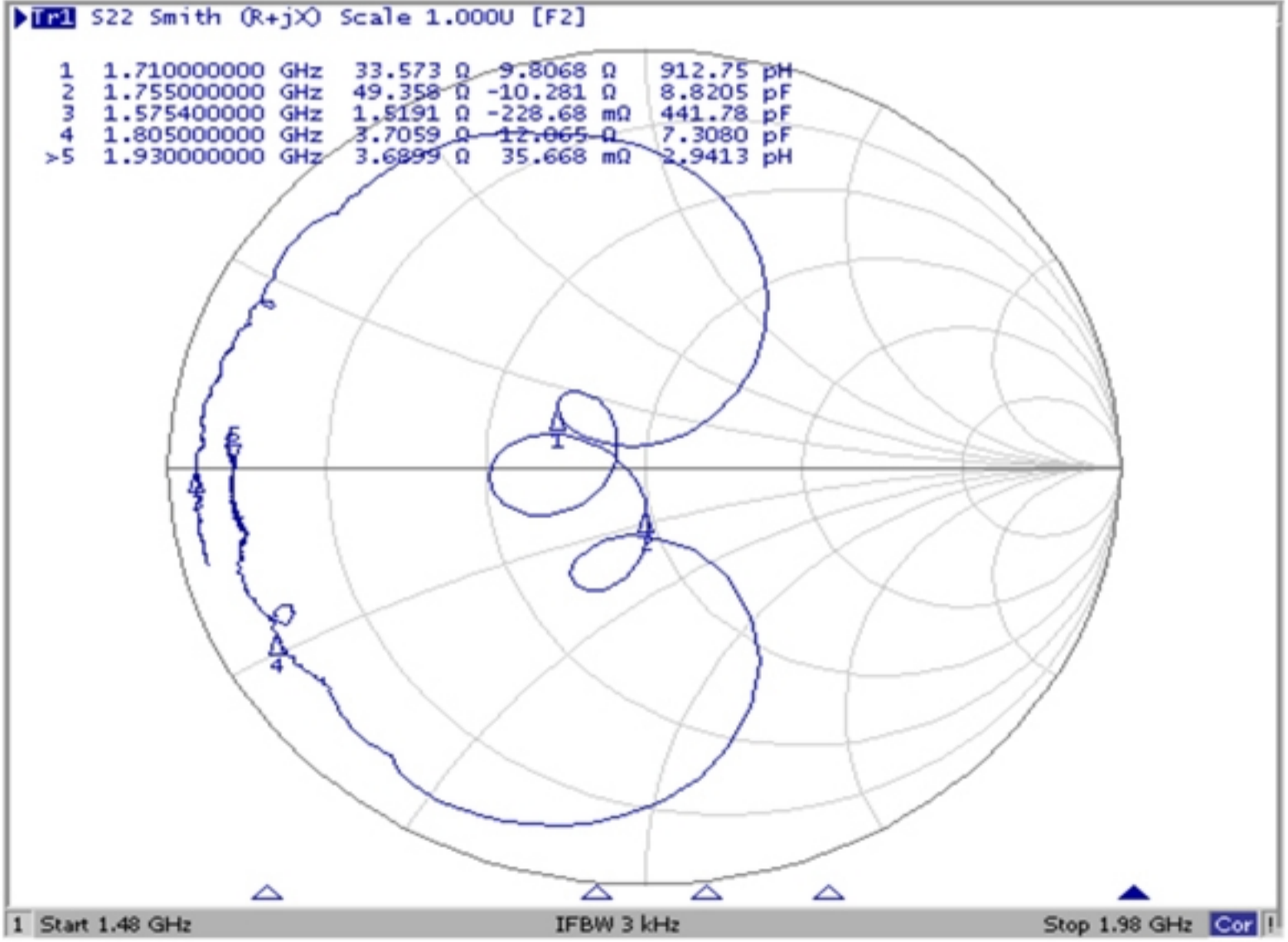
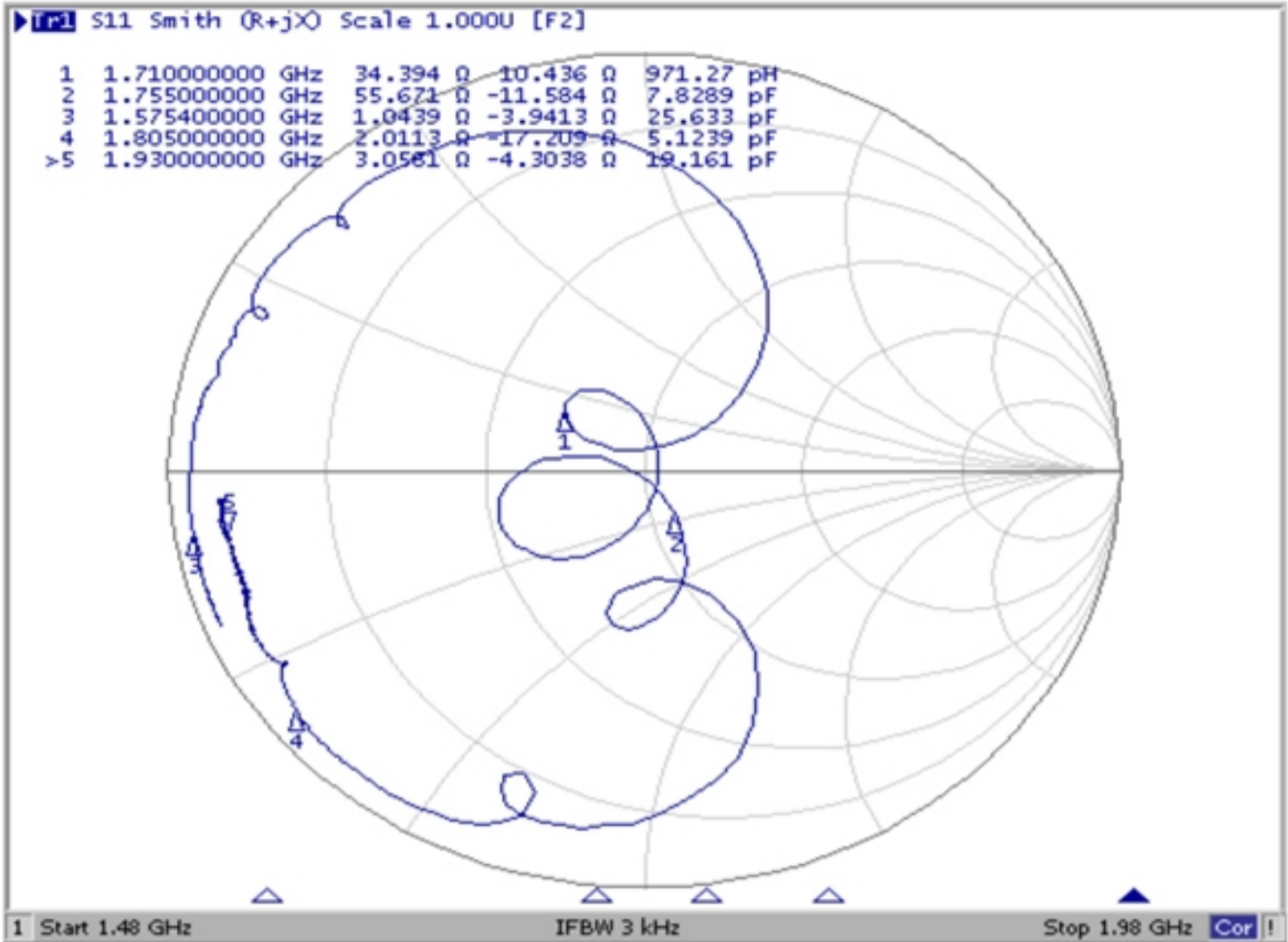


Reflection Functions:

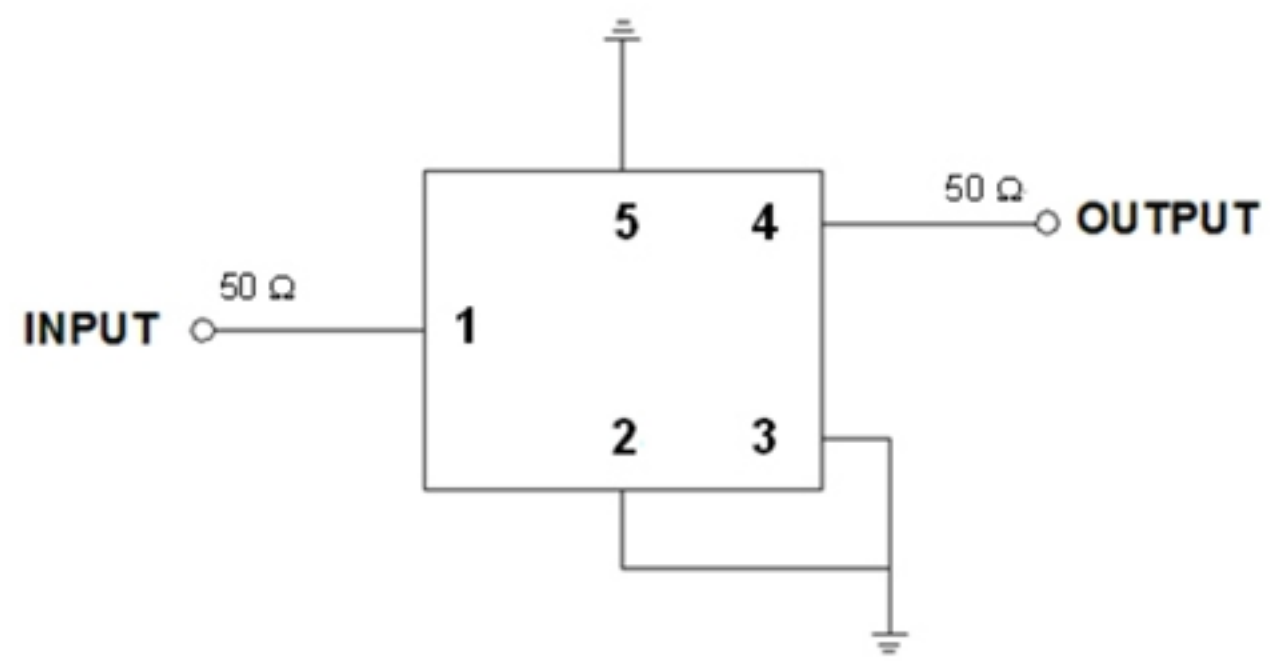
VSWR



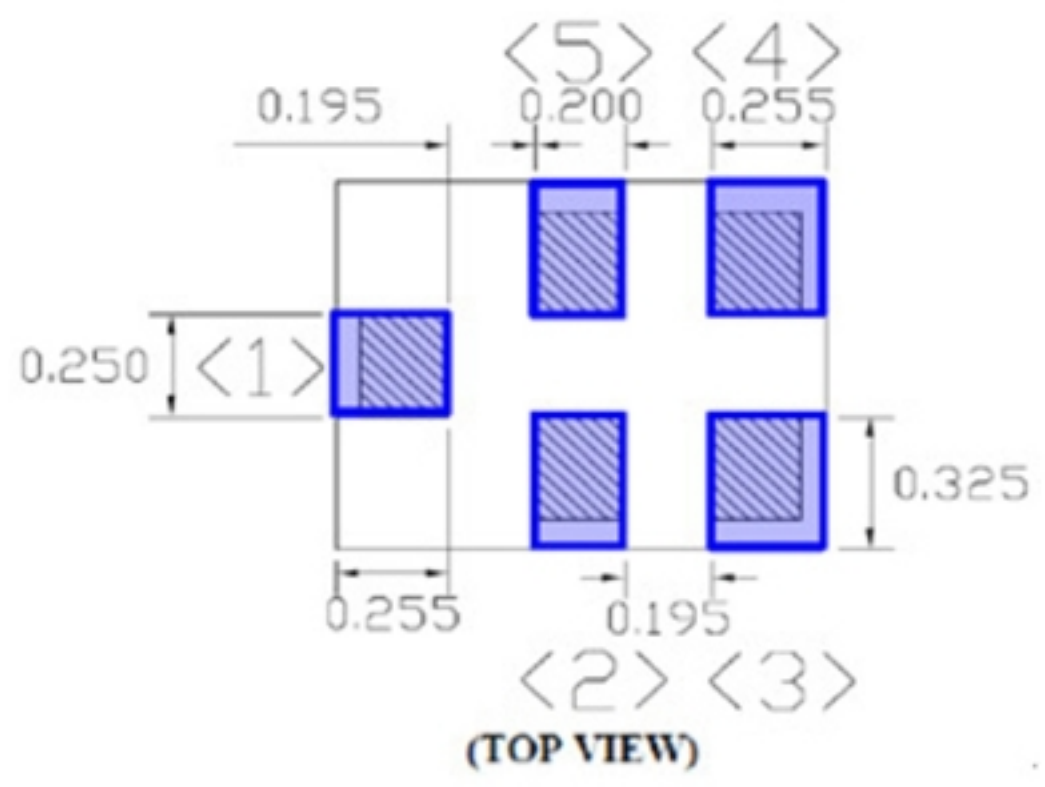
Smith Chart



D. MEASUREMENT CIRCUIT:

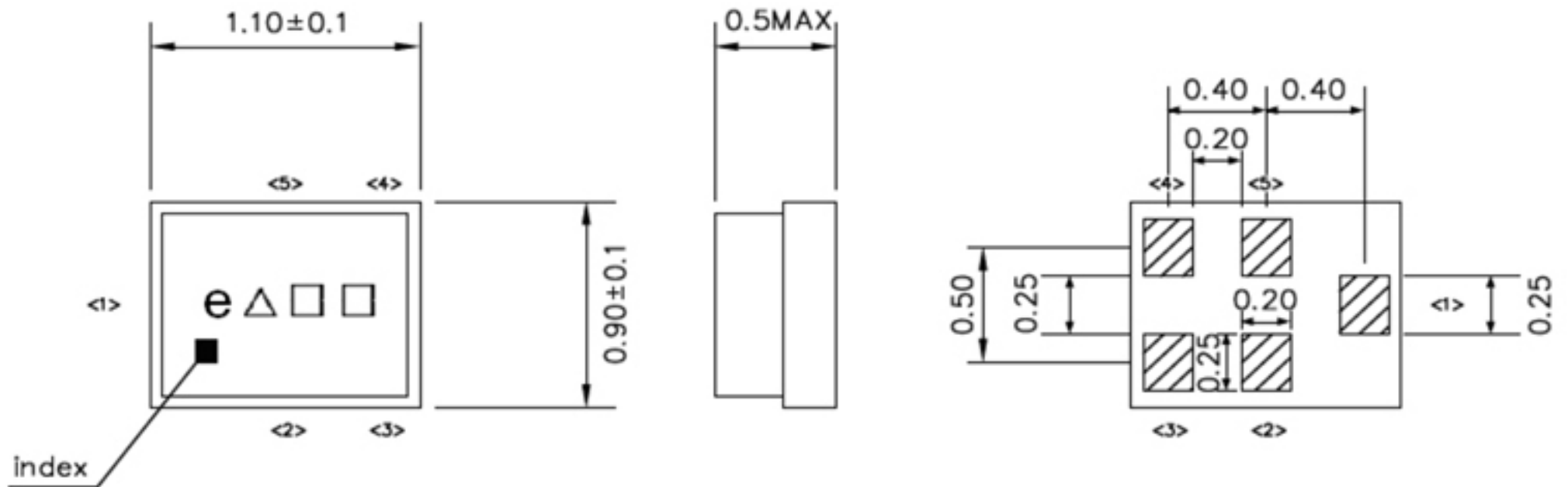


E. PCB Footprint:



F OUTLINE DRAWING:

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



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

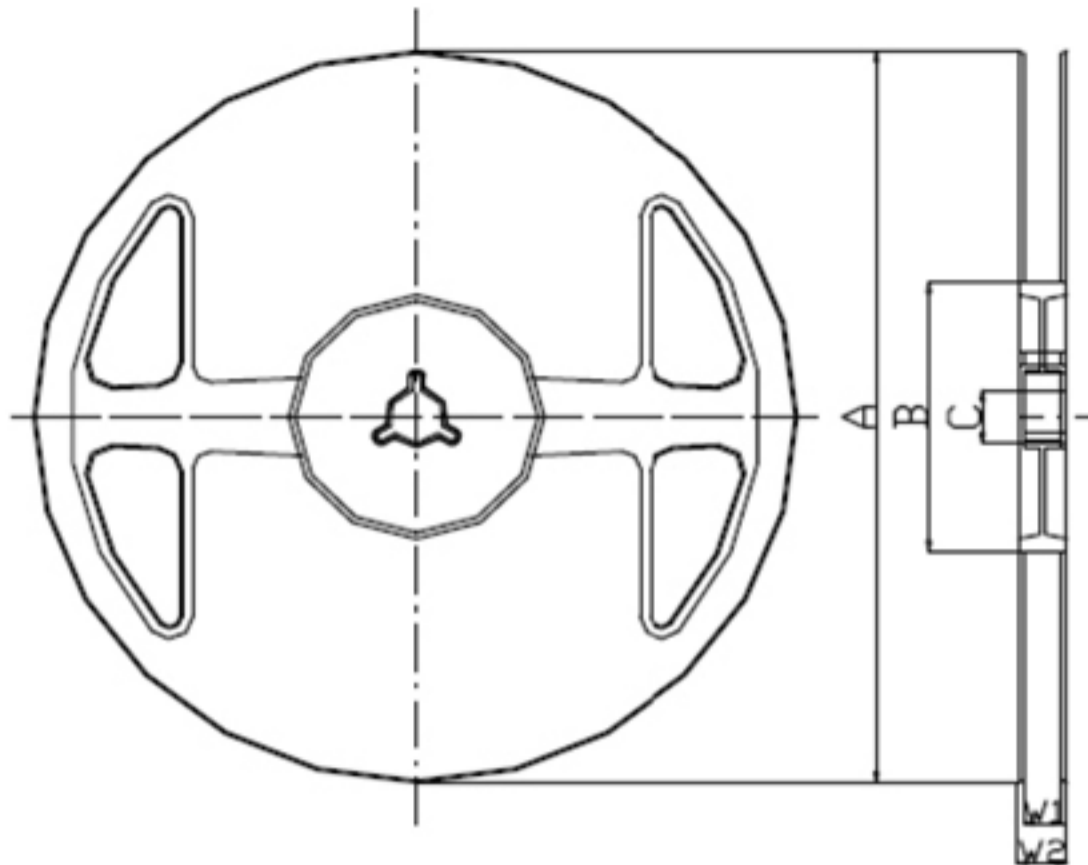
△ : Date Code

□ : 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.
2017	A	B	C	D	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	V	W	X	Y	Z
2019	a	b	c	d	e	f	g	h	j	k	l	m
2020	n	p	q	r	s	t	u	v	w	x	y	z

G. PACKING: (Ref: WI-75M03)
1. REEL DIMENSION



Materials of Reel

Material : Polystyrene + Carbon

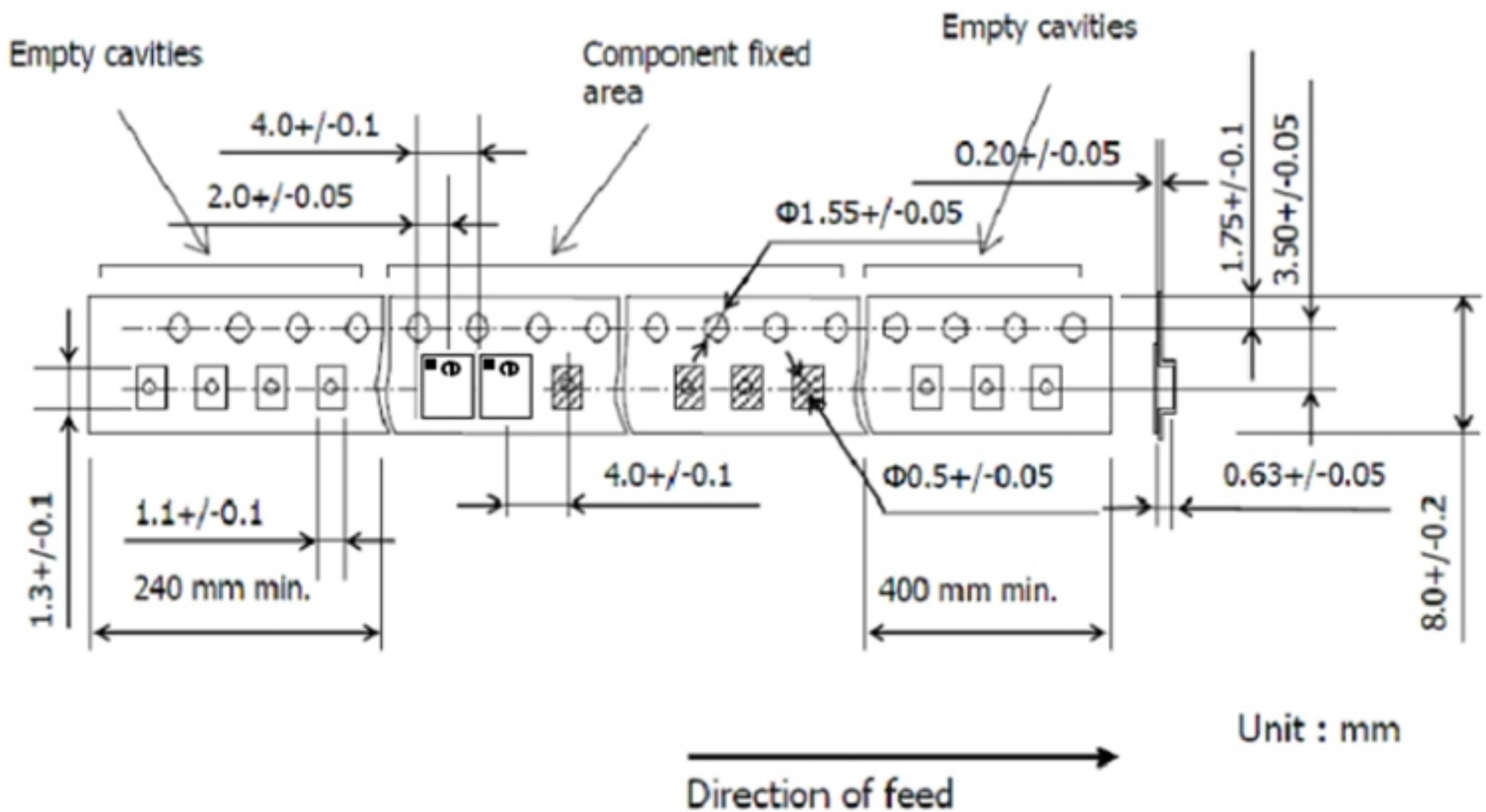
Color : Black

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

Unit : mm

A	B	C	W1	W2
ϕ 180.0 +0.0/-1.5	ϕ 66.0 +/-0.5	ϕ 13.0 +/-0.2	9.0 +1.0/-0.0	11.4 +/-1.0

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°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at $260^{\circ}\text{C}+0/-5^{\circ}\text{C}$ peak (20~40sec).
4. Time: 2 times.

