

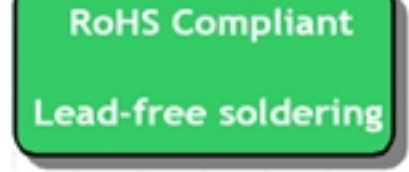
# SAW Filter 942.5 MHz

MODEL NO.:TA1839A

REV. NO.:2.0

## A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : +/-5 V
3. Operating Temperature: -20 °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)



Electrostatic Sensitive Device (ESD)

## B. ELECTRICAL CHARACTERISTICS:

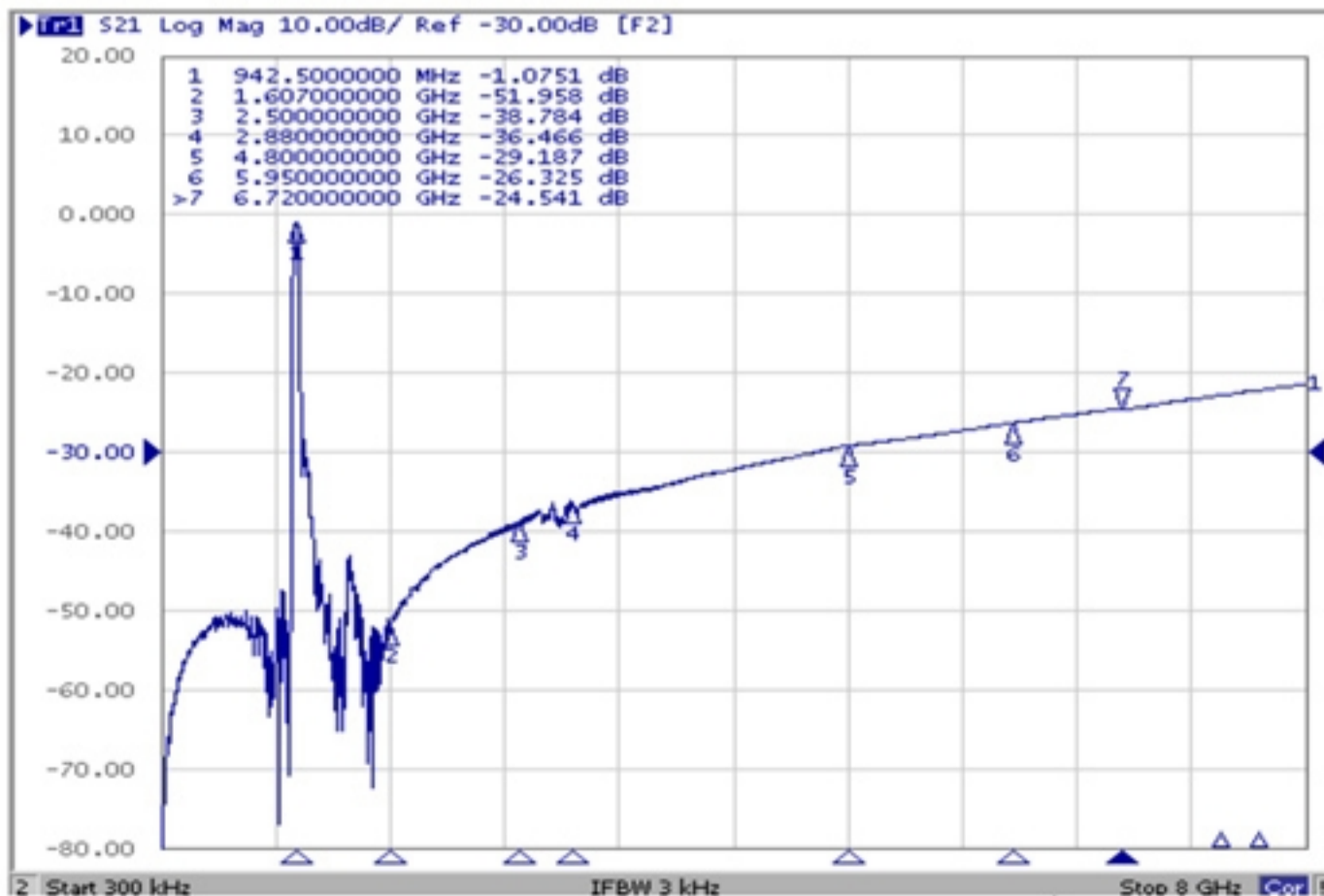
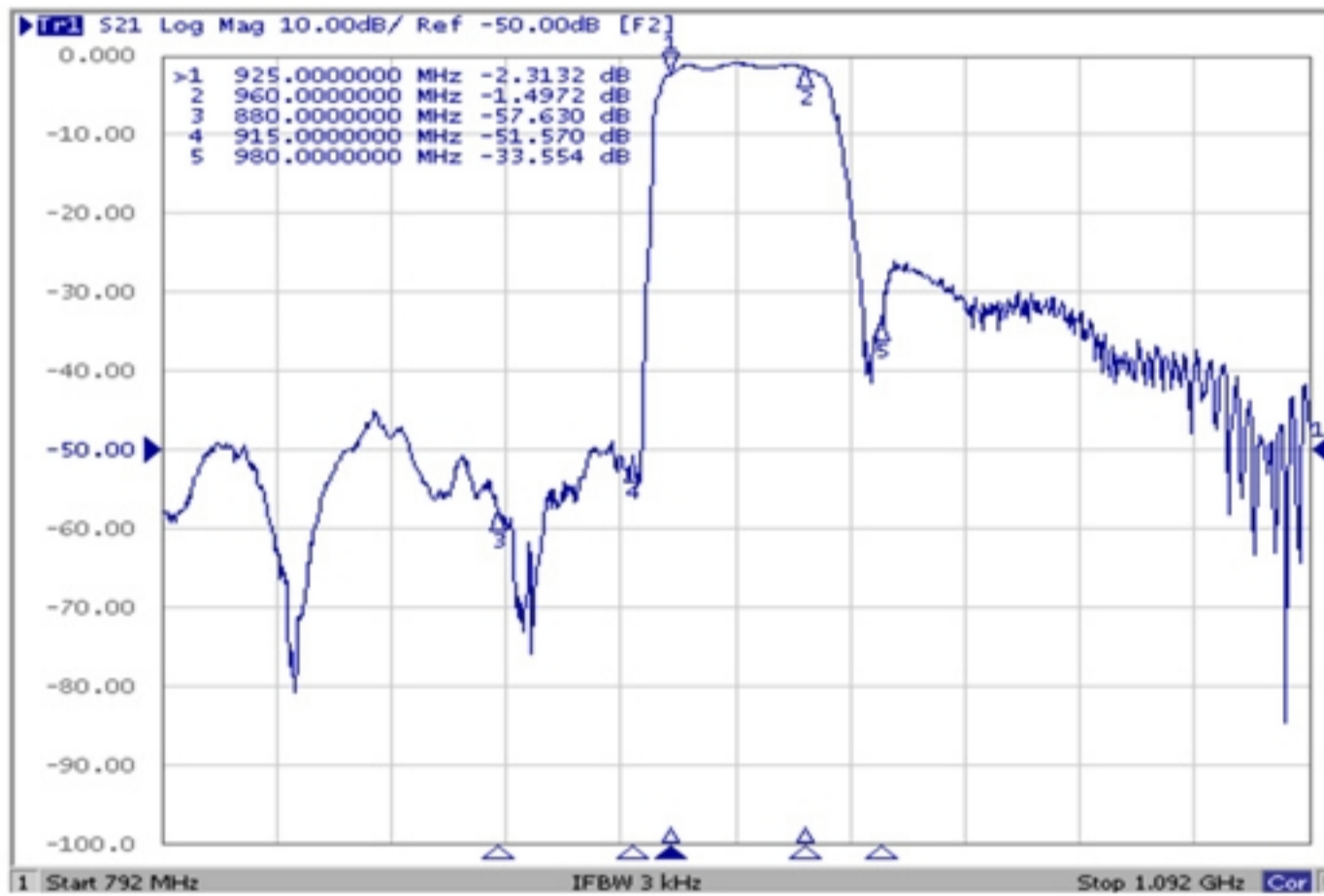
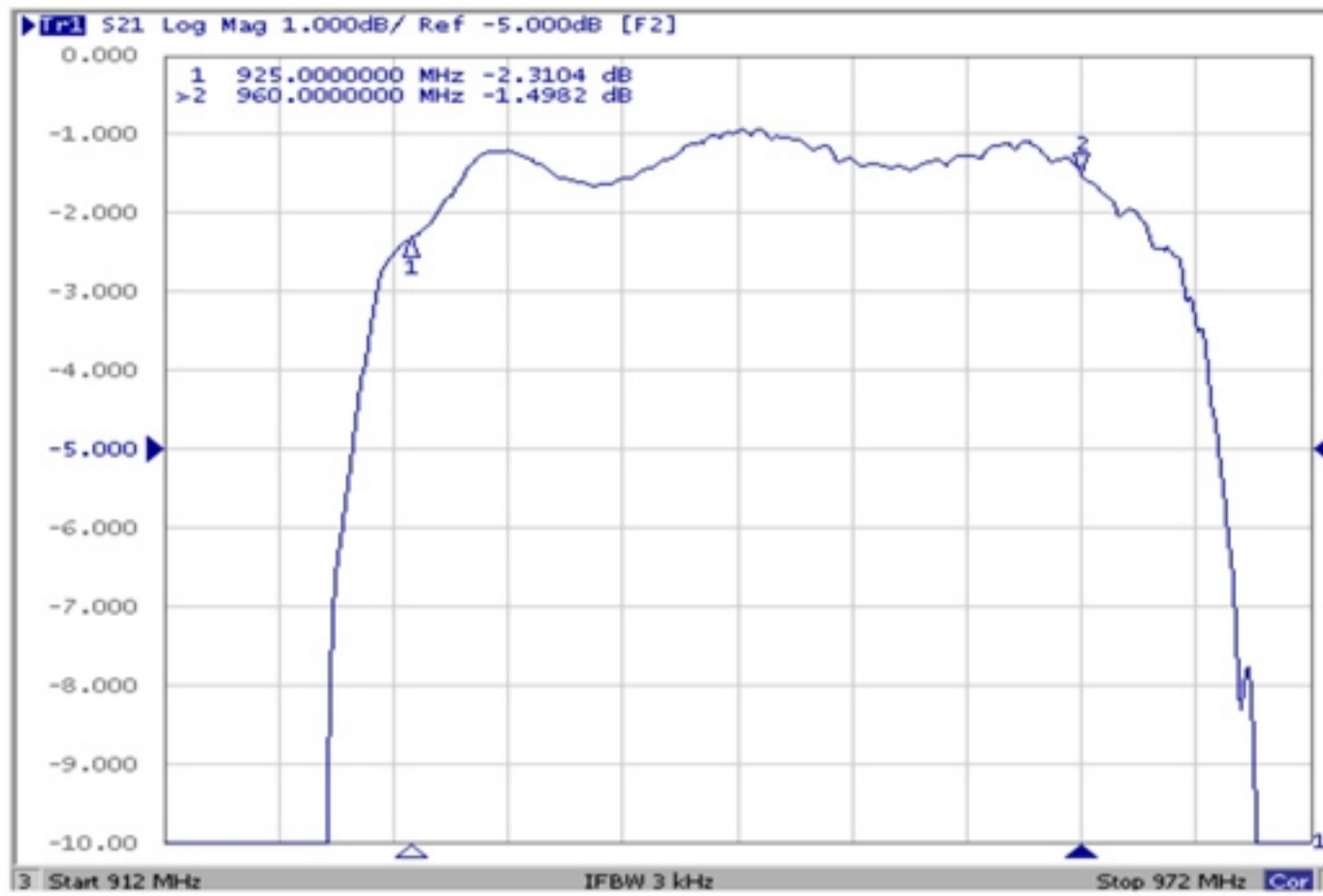
Terminating source impedance:  $Z_s = 50 \Omega$

Terminating load impedance:  $Z_L = 50 \Omega$

Item	Unit	Min.	Typ.	Max.
<b>Center Frequency</b> <b>Fc</b>	MHz	-	942.5	-
<b>Insertion Loss</b> (925~960 MHz) <b>IL</b>	dB(*1)	-	2.0	3.0
<b>Amplitude Ripple</b> (925~960 MHz)	dB	-	1.3	2.3
<b>Input VSWR</b> (925~960 MHz)	-	-	1.9	2.3
<b>Output VSWR</b> (925~960 MHz)	-	-	2.0	2.3
<b>Attenuation</b> (Reference level from 0 dB)				
880 ~ 915 MHz	dB	46	48	-
980 ~ 1558 MHz	dB	15	26	-
1559 ~ 1607 MHz	dB	40	51	-
1850 ~ 1920 MHz	dB	35	44	-
2400 ~ 2500 MHz	dB	30	38	-
2775 ~ 2880 MHz	dB	28	36	-
3700 ~ 3840 MHz	dB	25	32	-
4625 ~ 4800 MHz	dB	20	30	-
4900 ~ 5950 MHz	dB	18	27	-
5550 ~ 5725 MHz	dB	18	27	-
6475 ~ 6720 MHz	dB	15	25	-
7400 ~ 7680 MHz	dB	15	23	-

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

### C. FREQUENCY CHARACTERISTICS:

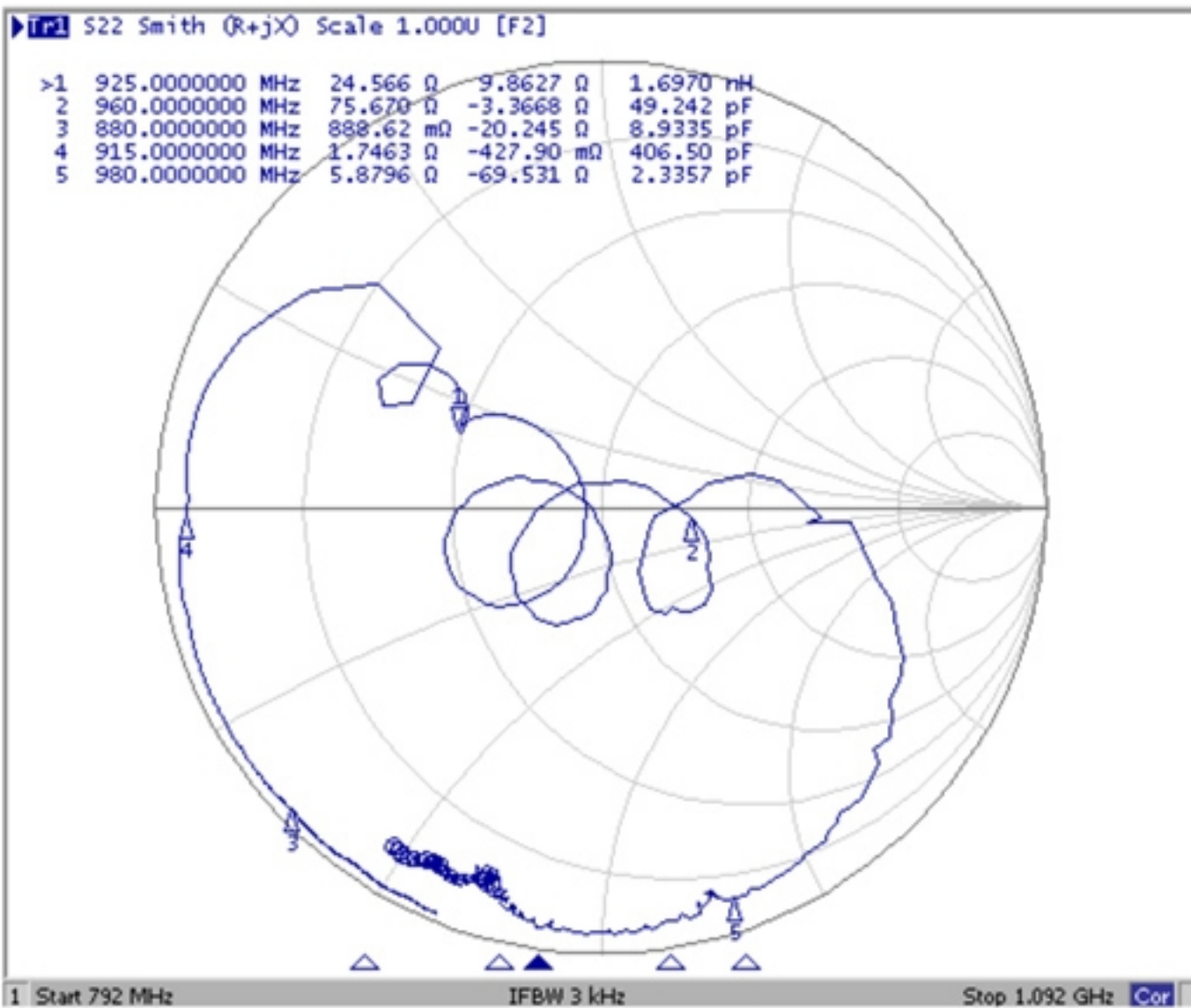
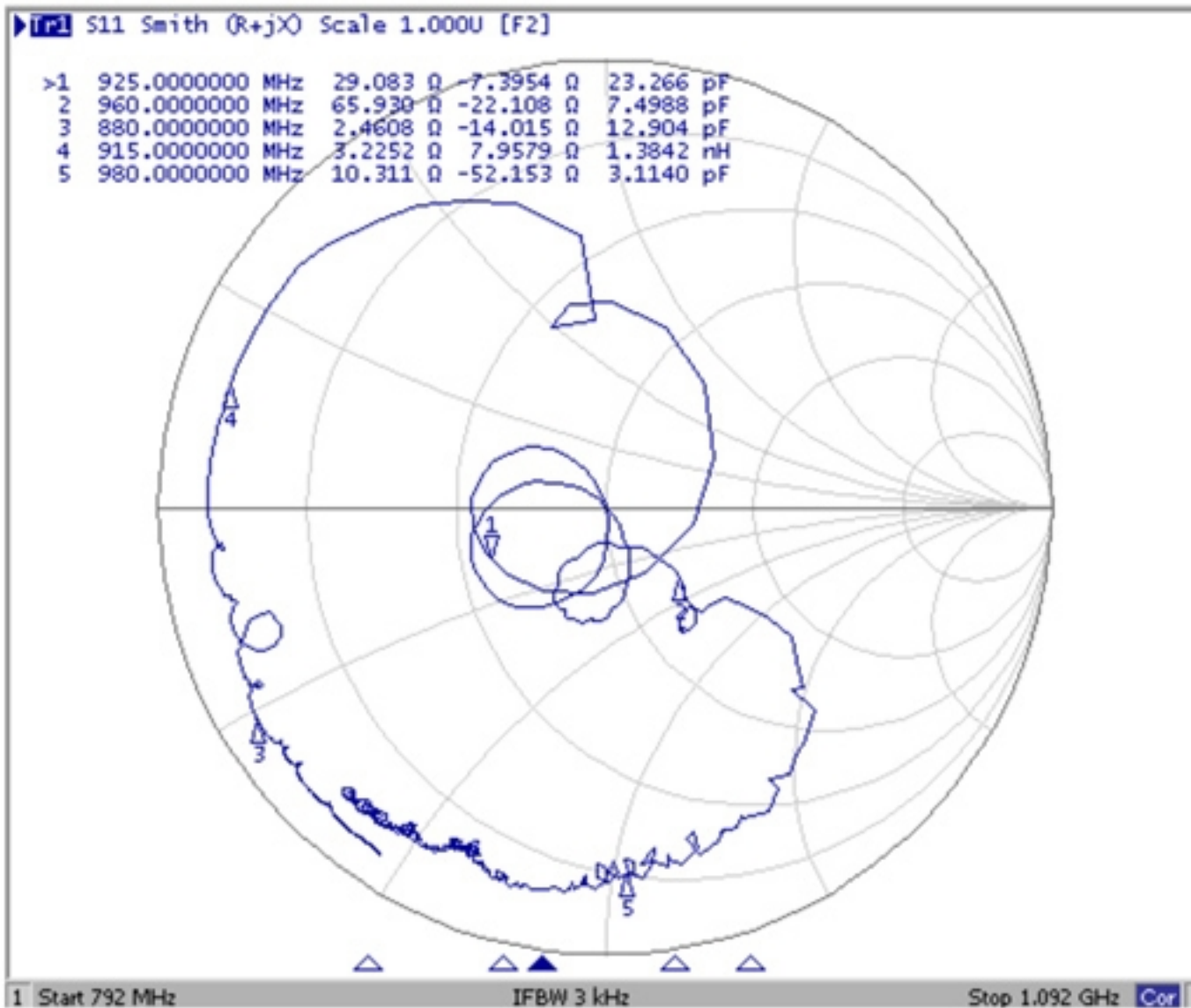


# Reflection Functions:

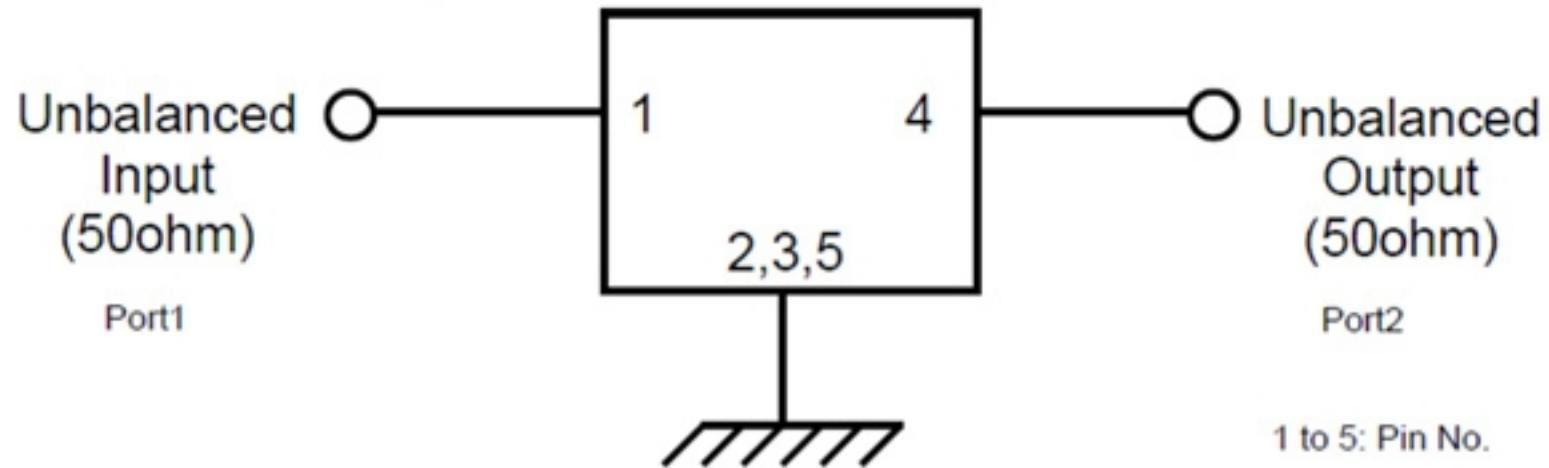
## VSWR



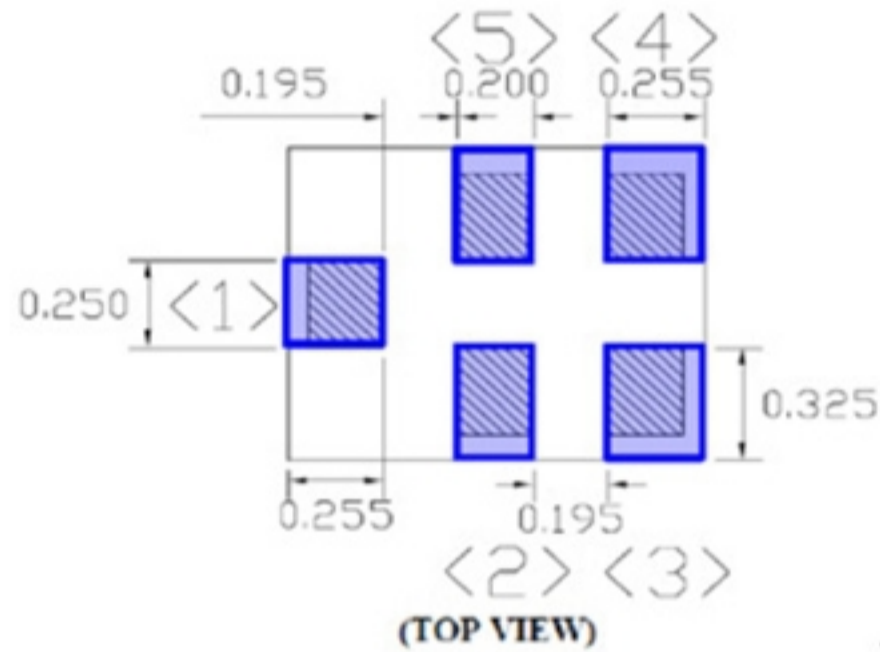
## Smith Chart



**D. MEASUREMENT CIRCUIT:**

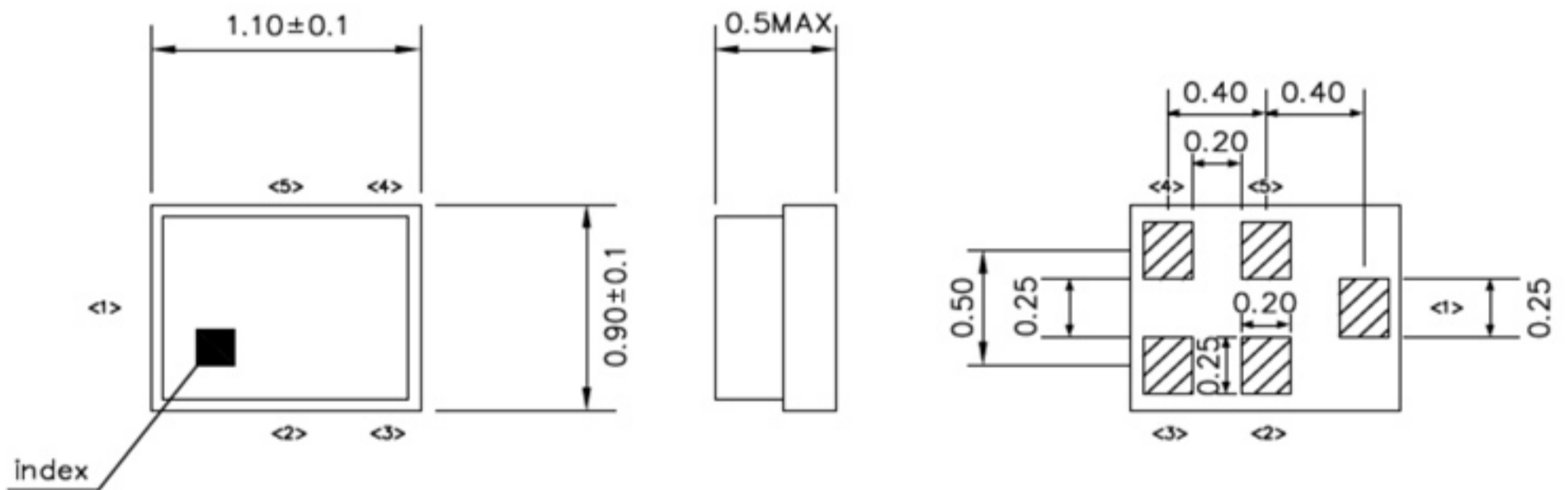


**E. PCB Footprint:**



**F OUTLINE DRAWING (Mass Production):**

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

**Top View (Sample Production):**



**Top View (Mass Production):**



△ : **Date Code**

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

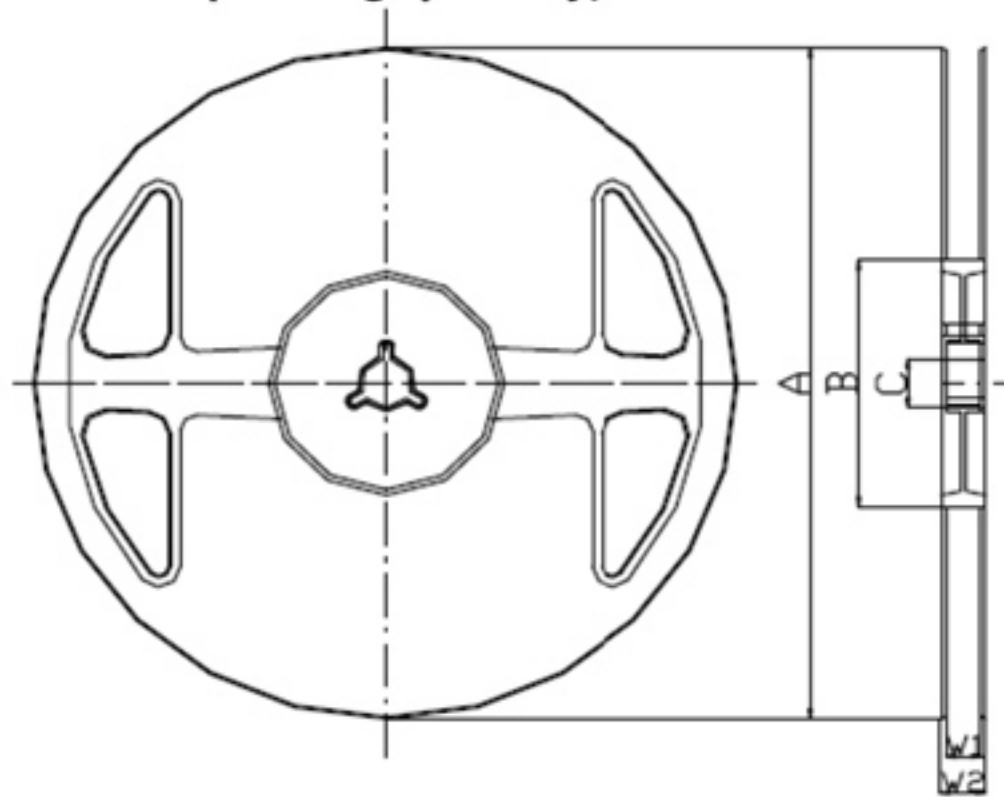
**Date Code:**

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2017	A	B	C	Đ	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	∇	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**

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



**Materials of Reel**

Material : Polystyrene + Carbon

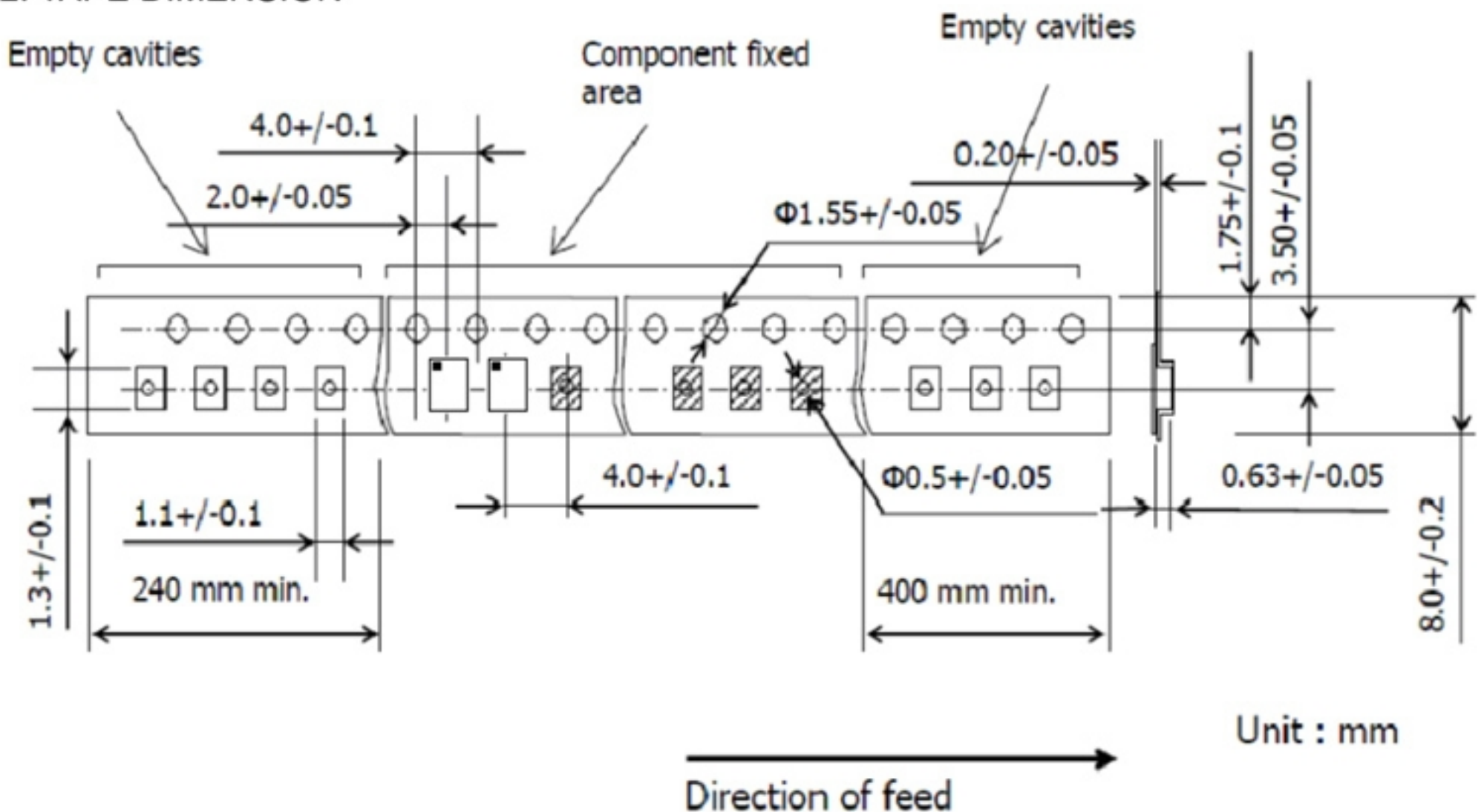
Color : Black

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

Unit : mm

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

**2. TAPE DIMENSION**



### H. Recommended Reflow Profile:

1. Preheating shall be fixed at 150~180°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.

