

# SAW Filter 1960 MHz 60MHz BW Band 2 SMD 1.1x0.9 mm

MODEL NO.:TA1870AM

REV.1.0

## A. MAXIMUM RATING:

1. Operating temperature range: -30 °C to +90 °C
2. Storage temperature range: -40 °C to +90 °C
3. Maximum Input Power: +10 dBm
4. Maximum DC Voltage: +/-0 V
5. Moisture Sensitivity Level: Level 1

RoHS Compliant

Lead-free soldering

Electrostatic Sensitive Device (ESD)

## B. ELECTRICAL CHARACTERISTICS:

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

Terminating load impedance:  $Z_L = 50\Omega//4.7nH$  (Single-ended)

Parameters Description		Unit	Minimum	Typical	Maximum
Center Frequency		MHz	-	1960	-
Insertion Loss	1930~1990 MHz	dB	-	2.3	4.0
Amplitude ripple	1930~1990 MHz	dBp-p	-	1.0	2.7
VSWR(Input)	1930~1990 MHz	-	-	1.9	2.3
VSWR(Output)	1930~1990 MHz	-	-	1.8	2.3
<b>Attenuation:</b>					
<b>DC~960 MHz</b>		dB	40	45	-
<b>1558~1608 MHz</b>		dB	35	40	-
<b>1710~1850 MHz</b>		dB	35	42	-
<b>1850~1910 MHz</b>		dB	32	36	-
<b>2020~2070 MHz</b>		dB	7	30	-
<b>2070~2400 MHz</b>		dB	25	33	-
<b>2400~2500 MHz</b>		dB	33	44	-
<b>2500~3780 MHz</b>		dB	28	31	-
<b>3780~3980 MHz</b>		dB	28	30	-
<b>3980~5790 MHz</b>		dB	21	34	-
<b>5790~5970 MHz</b>		dB	21	34	-
<b>5970~7720 MHz</b>		dB	21	26	-
<b>7720~7960 MHz</b>		dB	17	20	-
<b>7960~8000 MHz</b>		dB	17	20	-

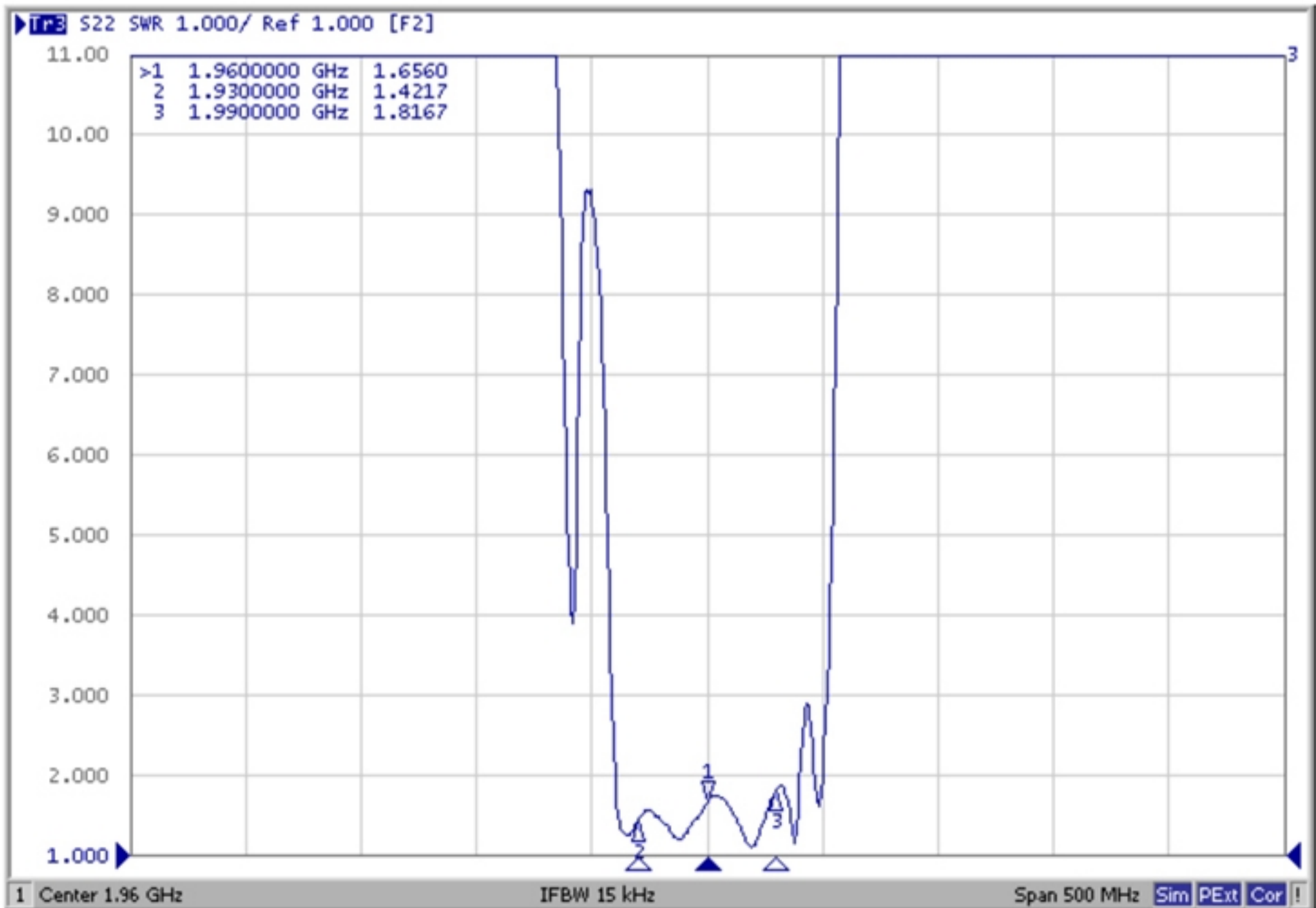
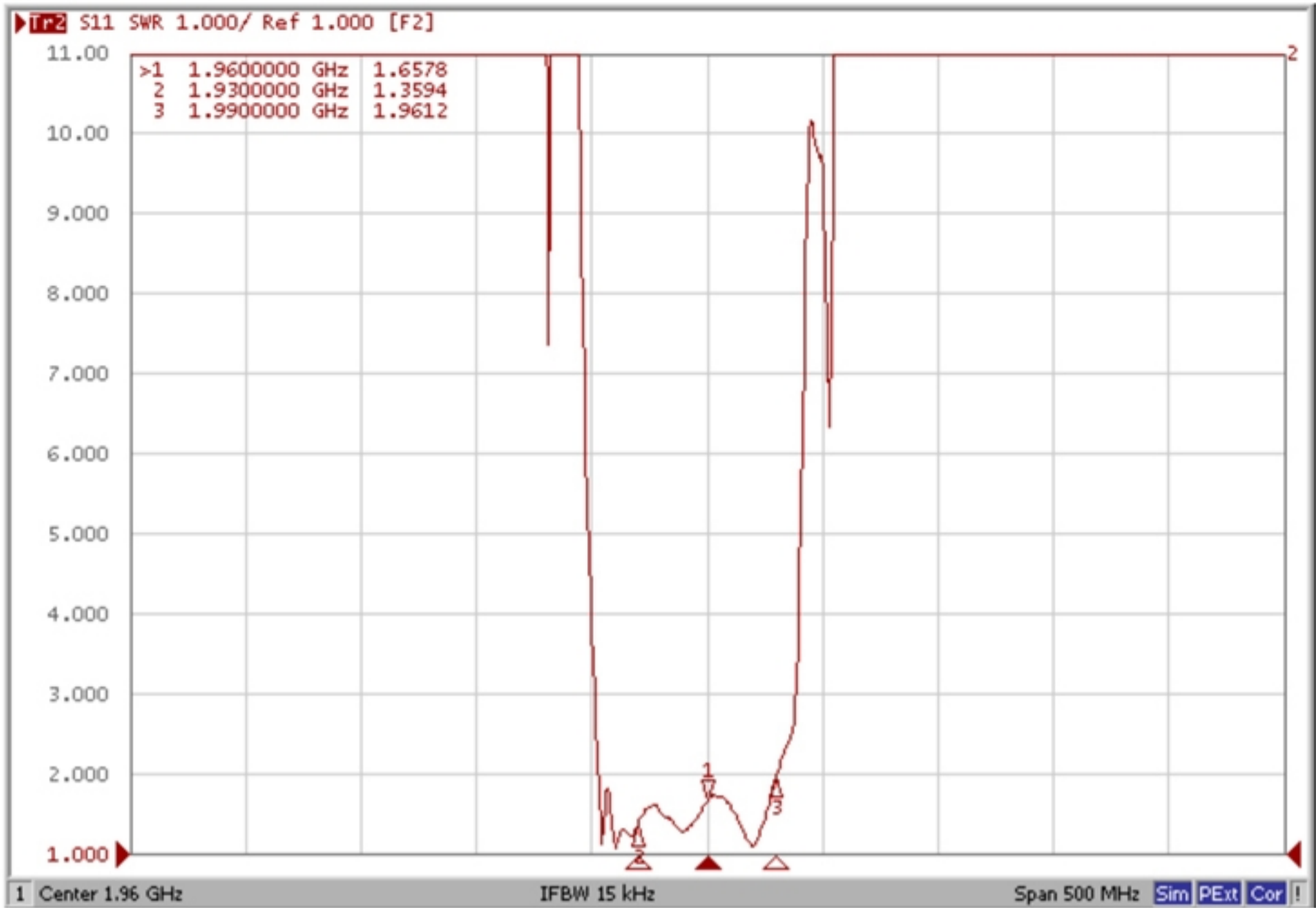
Notes : (1) With Matching Network .

### C. FREQUENCY CHARACTERISTIC:

#### Frequency Response

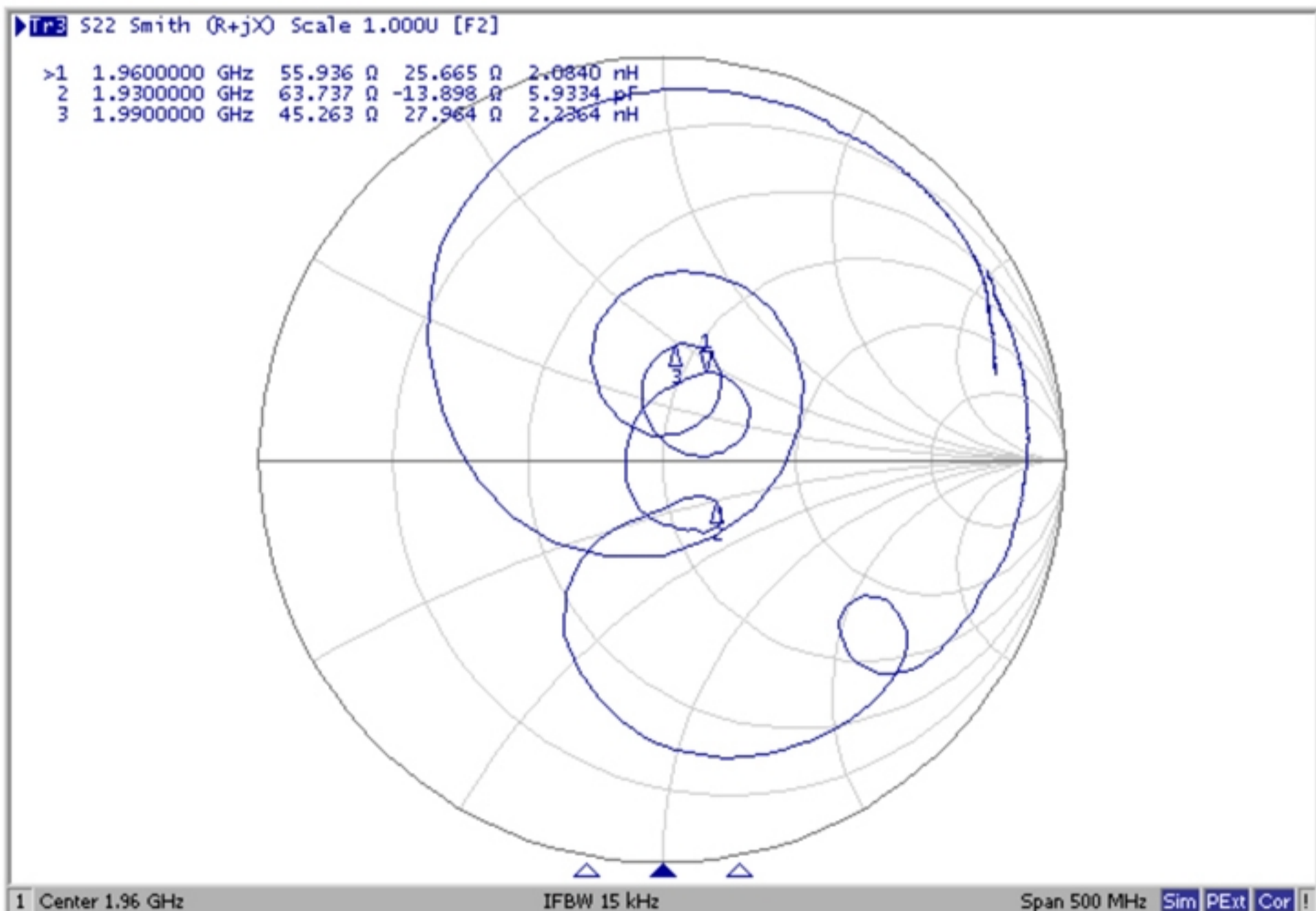
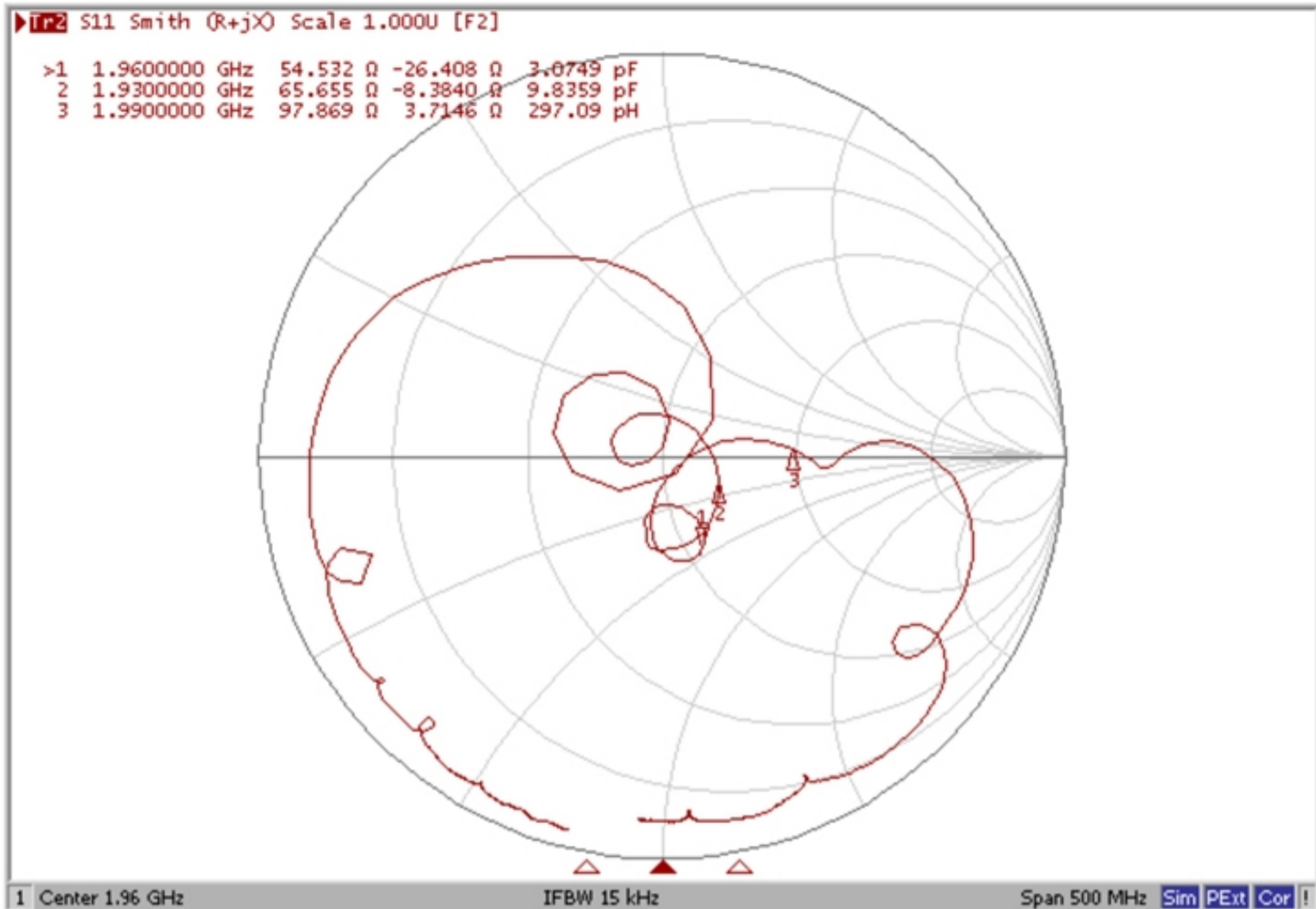


# VSWR

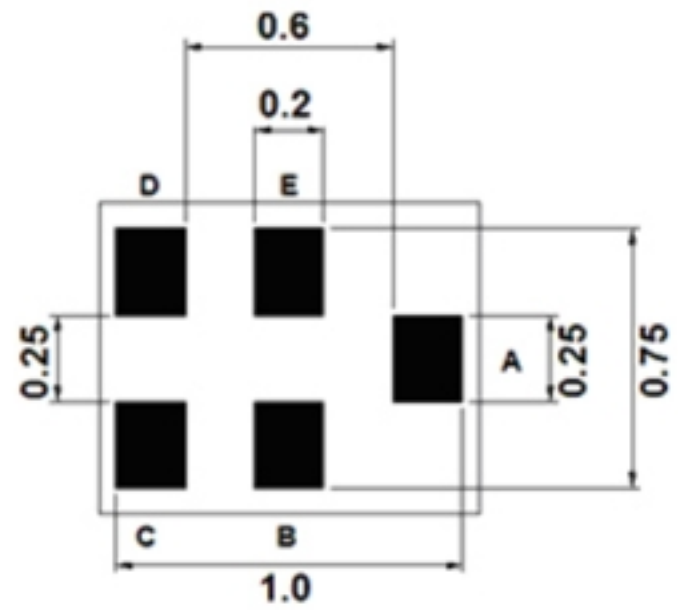
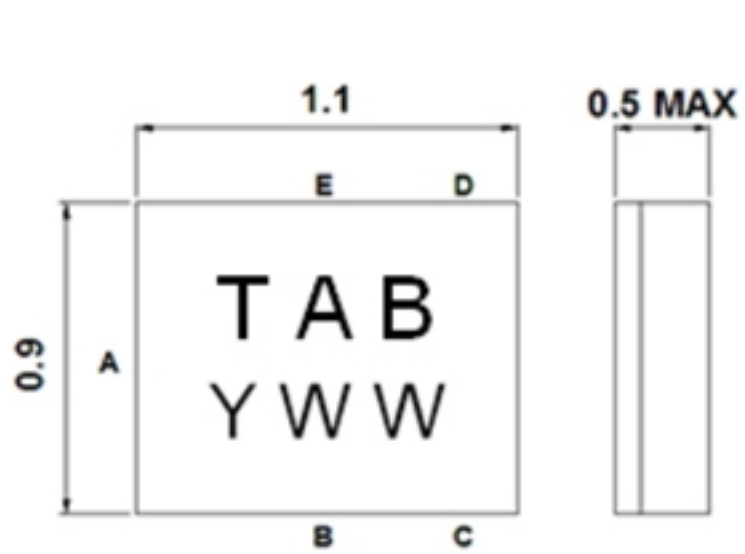




# Smith Chart



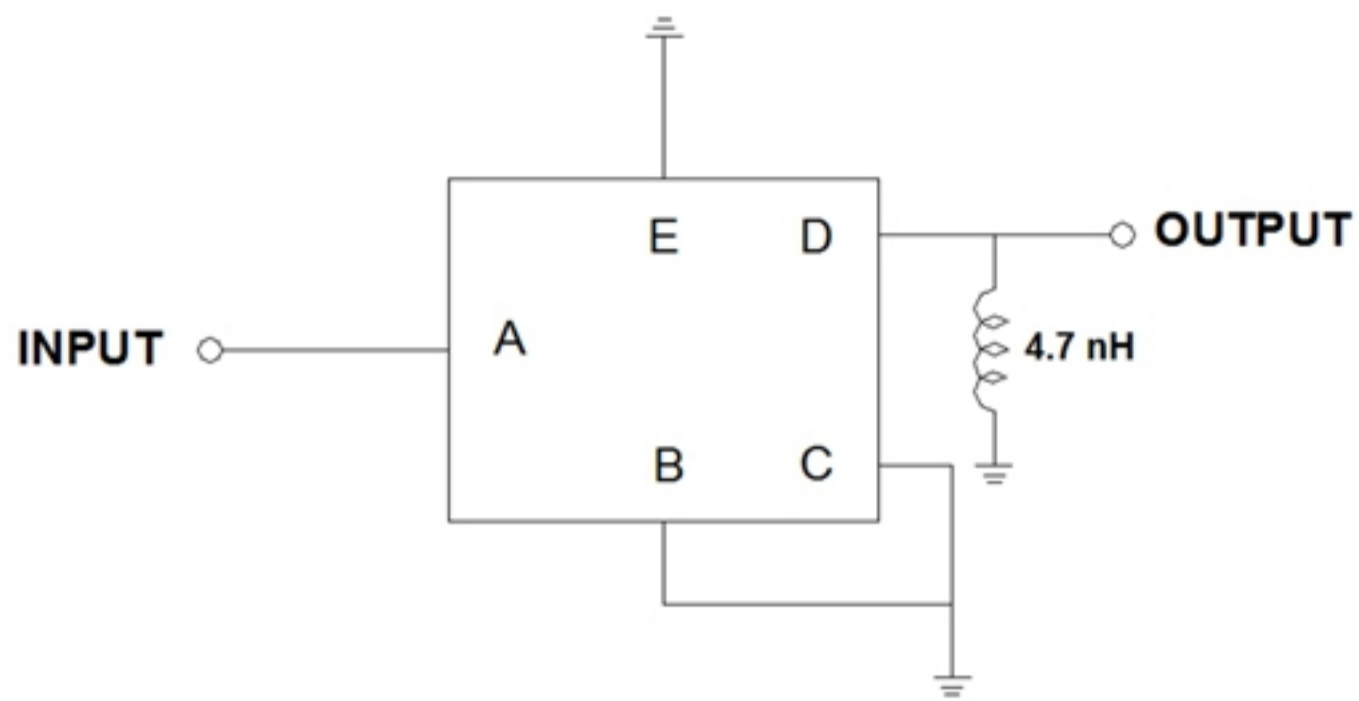
**.OUTLINE DRAWING:**



Marking Descriptions	
AB	Series number
Y	Year Code (2020 → 0)
WW	Week Code (Week3 → 03)

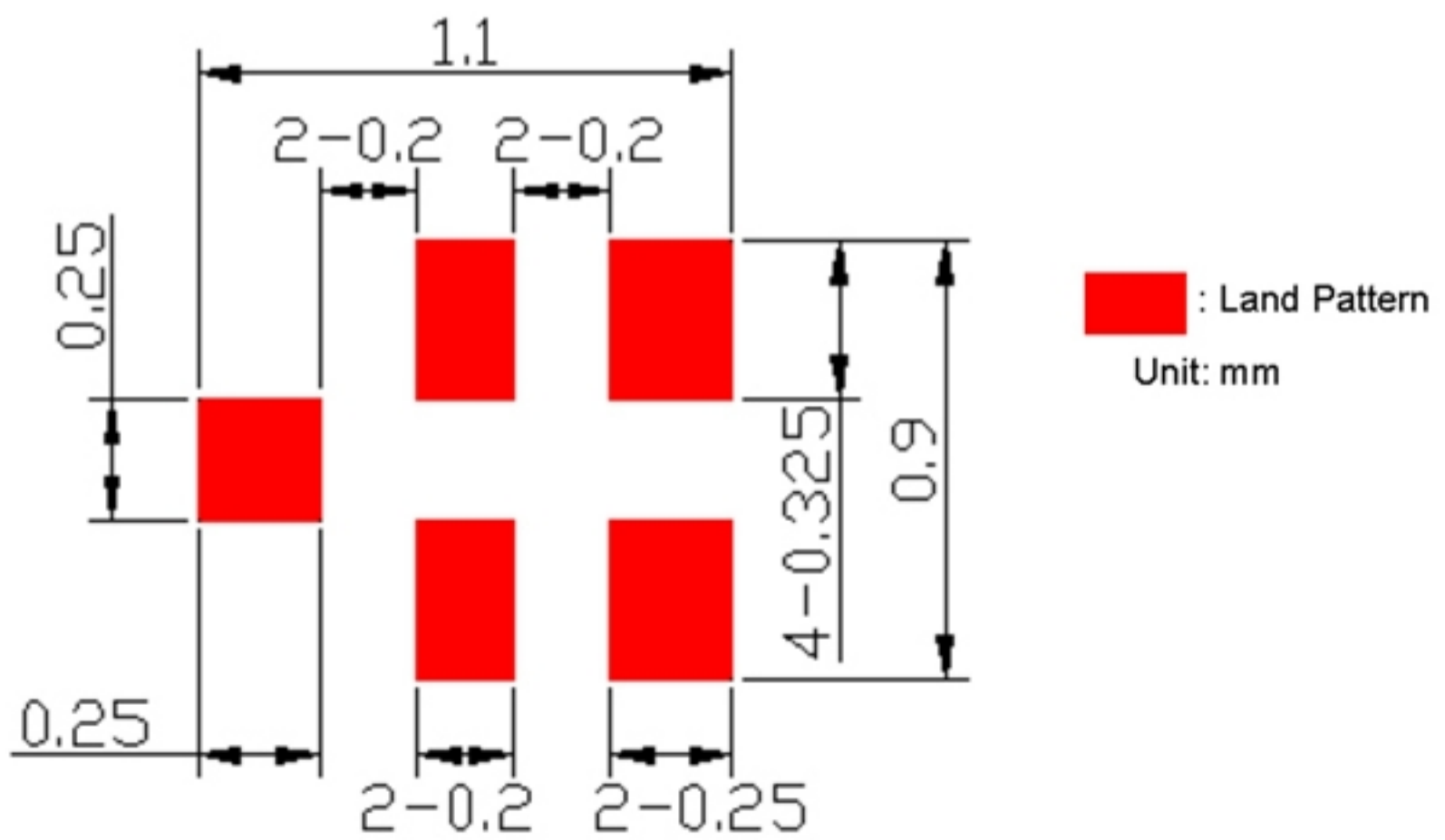
Pin Description	
B, C, E	Ground
A	Input
D	Output

**E. MEASUREMENT CIRCUIT:**



Source & Load Impedance: 50  $\Omega$

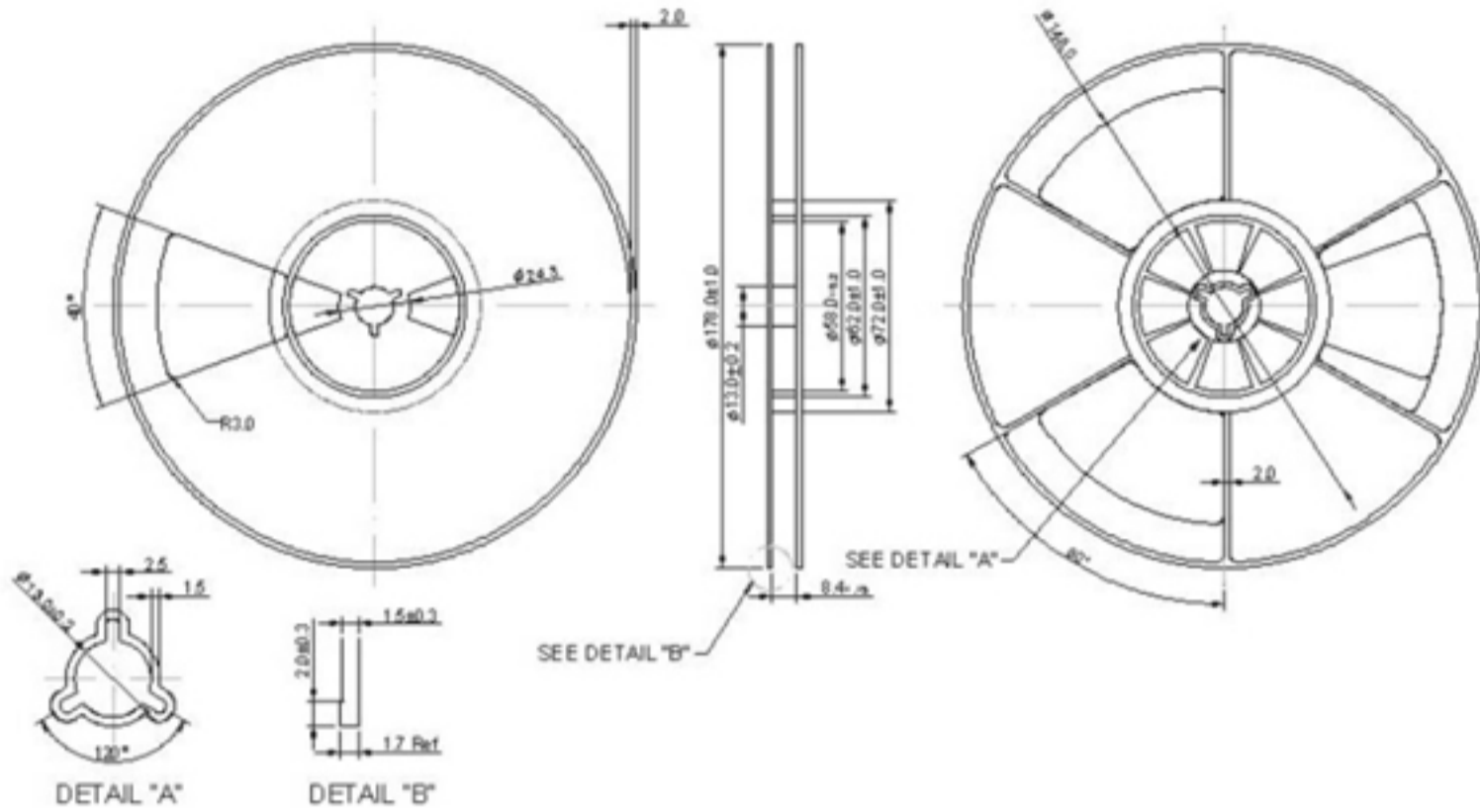
**F. PCB FOOTPRINT:**



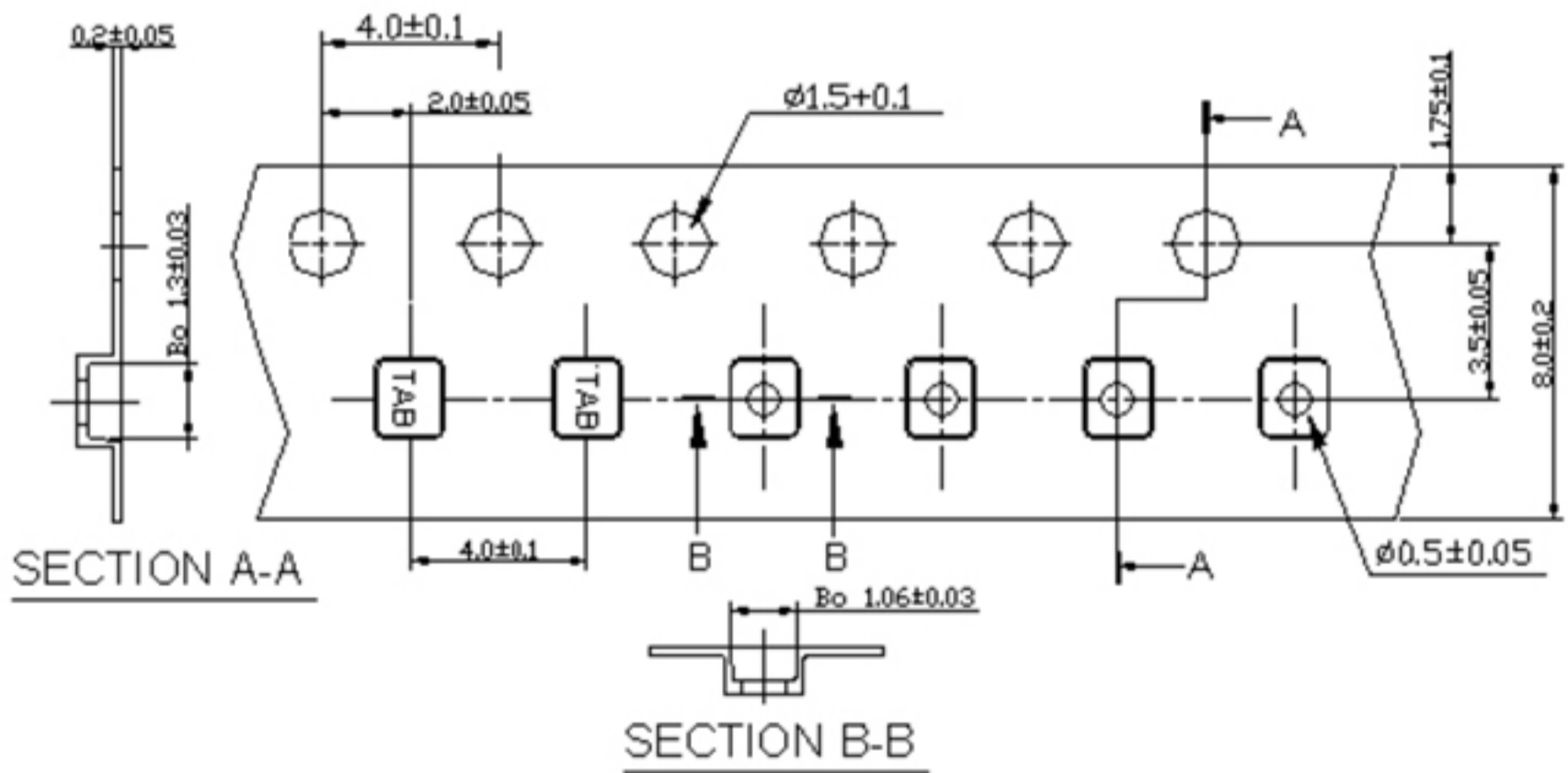
## G. PACKING:

### 1. REEL DIMENSION

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



### 2. TAPE DIMENSION



Direction of Feed



## 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.

