

## SAW Filter 915 MHz

MODEL NO.: TA2294A

REV. NO.:2

### A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 3V
3. Operating Temperature: -20°C to +85°C
4. Storage Temperature: -40°C to +85°C
5. Moisture Sensitivity Level: Level 3 (**MSL3**)

RoHS Compliant  
Lead free  
Lead-free soldering

Electrostatic Sensitive Device (**ESD**)

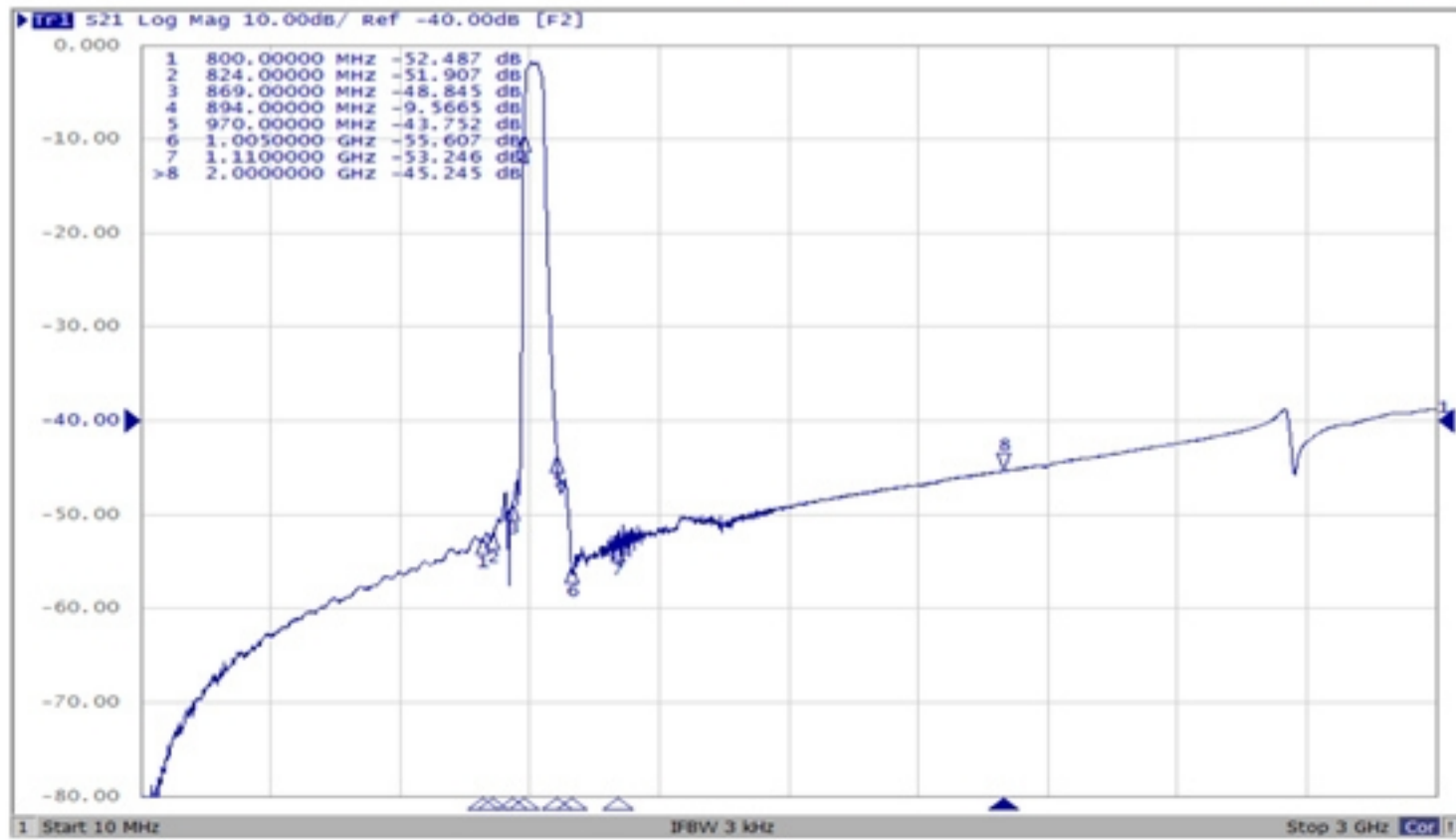
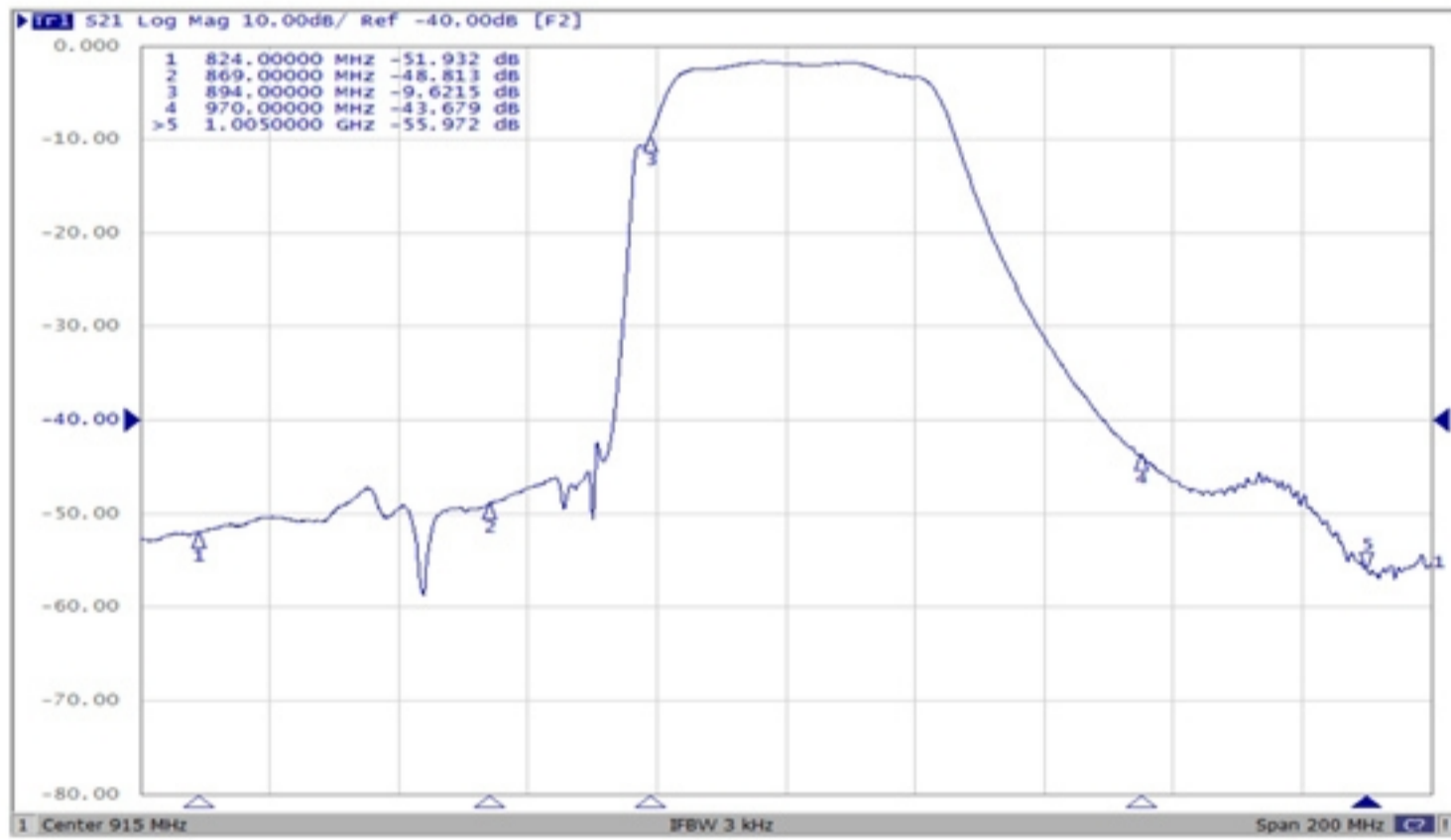
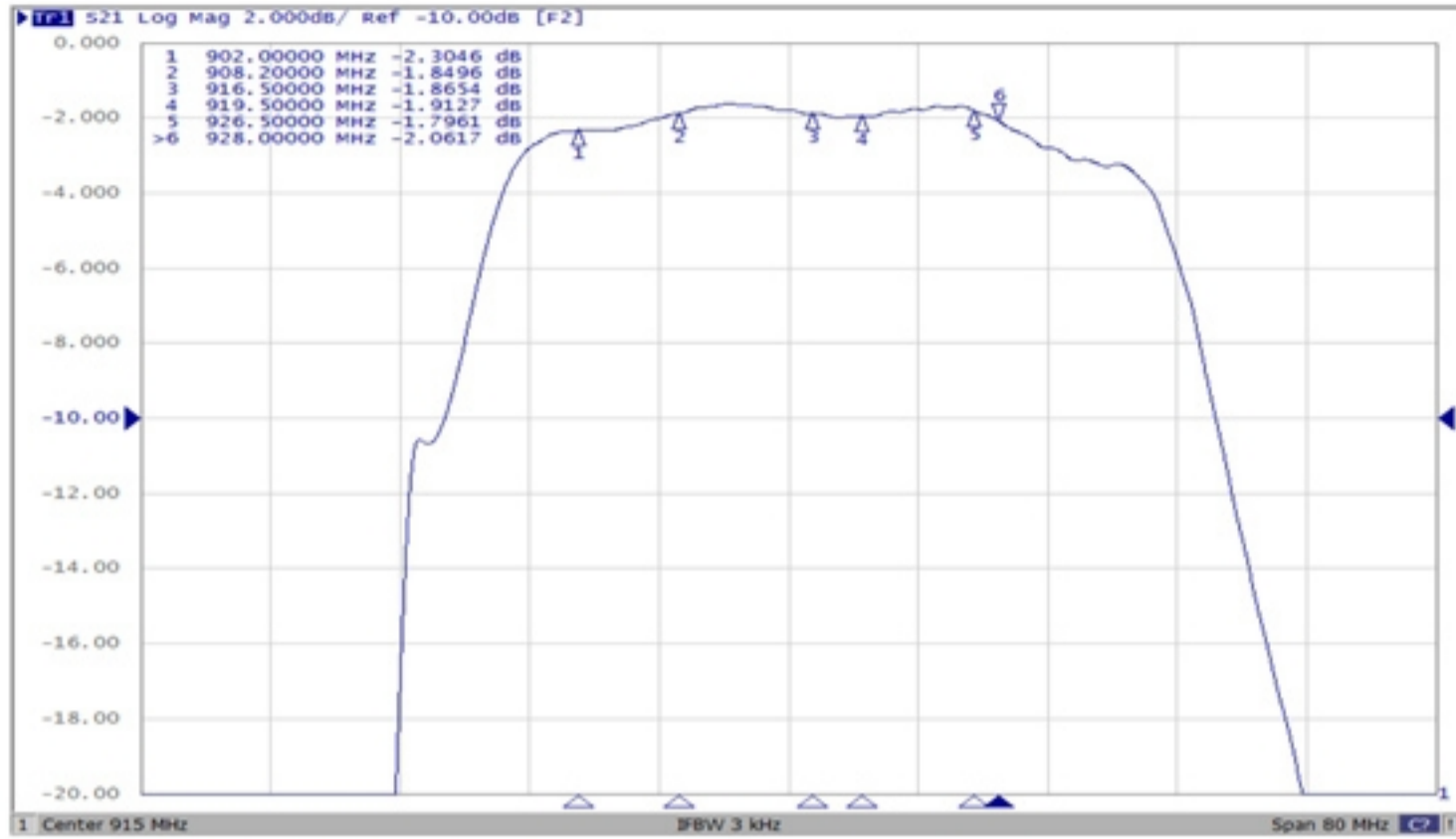
### B. ELECTRICAL CHARACTERISTICS:

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

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

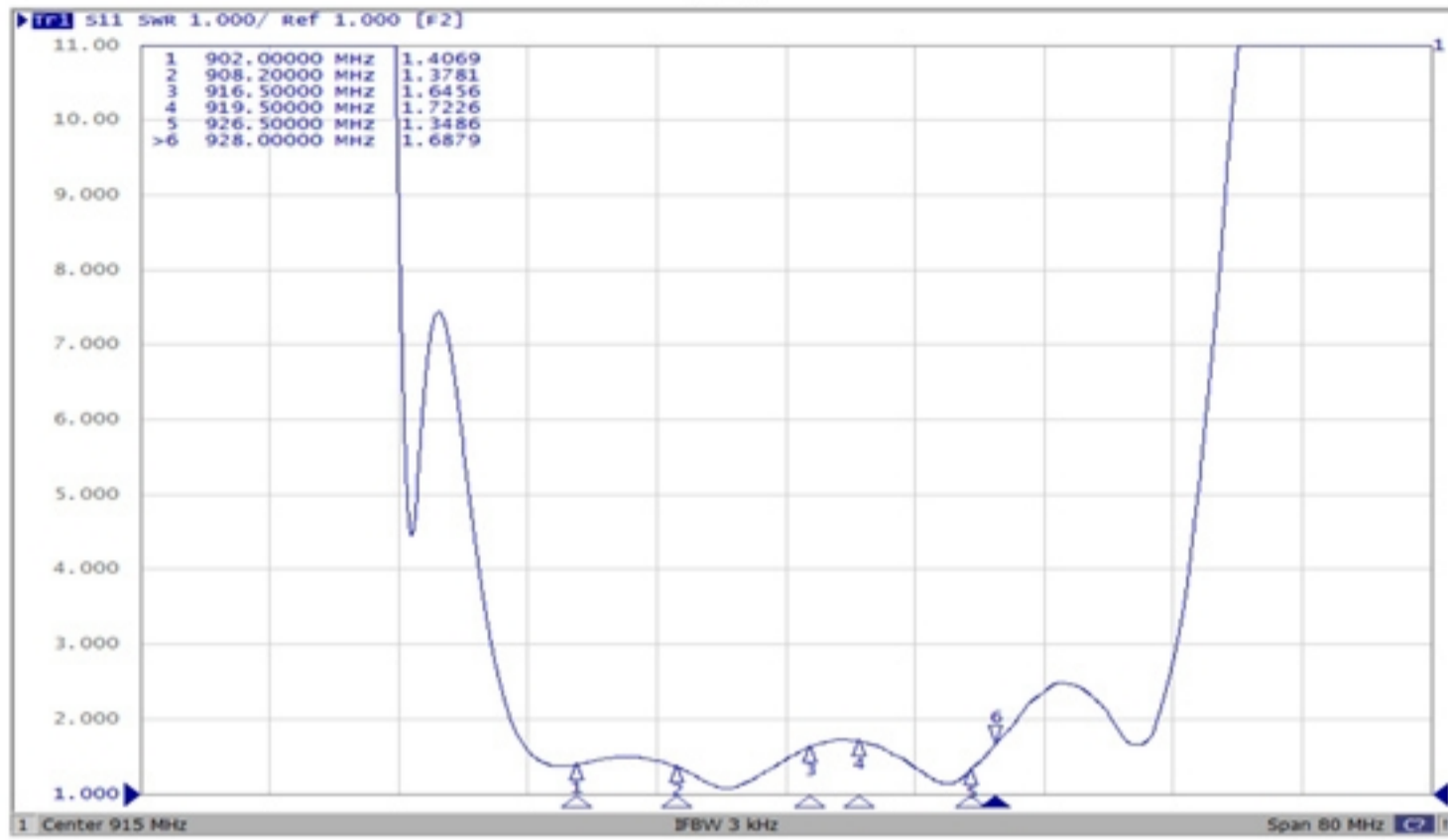
Item	Unit	Min.	Typ.	Max.	
<b>Center frequency</b> <b>F<sub>c</sub></b>	MHz	-	915	-	
<b>Insertion Loss</b> (902~928 MHz)	<b>IL</b> dB	-	2.3	3.6	
<b>Insertion Loss</b> (908.2~916.5 MHz)	<b>IL</b> dB	-	1.9	2.5	
<b>Insertion Loss</b> (919.5~926.5 MHz)	<b>IL</b> dB	-	2.0	3.0	
<b>Ripple Deviation</b> (902~928 MHz)	dB	-	0.7	2.0	
<b>VSWR</b> (902~928 MHz)	-	-	1.8	2.6	
<b>Attenuation</b> (Reference level from 0 dB)					
10 ~ 800 MHz	dB	47	52	-	
824 ~ 869 MHz	dB	40	47	-	
869 ~ 894 MHz	dB	-	9.5	-	
970 ~ 1005 MHz	dB	35	43	-	
1005 ~ 1110 MHz	dB	45	51	-	
1110 ~ 2000 MHz	dB	30	45	-	
2000 ~ 3000 MHz	dB	33	38	-	
<b>Temperature coefficient of frequency</b>	ppm/k	-	-36	-	

### C. FREQUENCY CHARACTERISTICS:

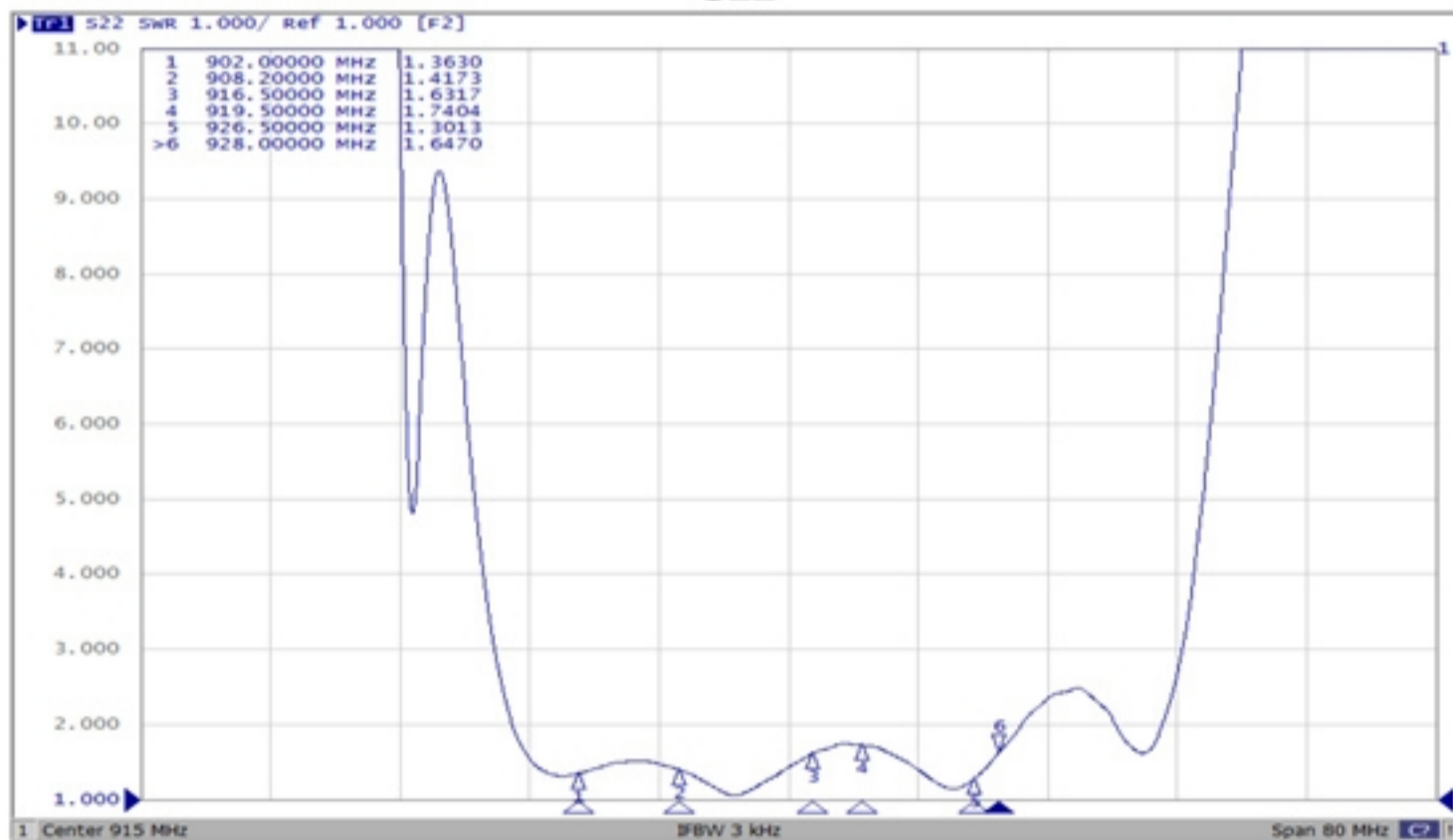


## Reflection Functions:

### S11

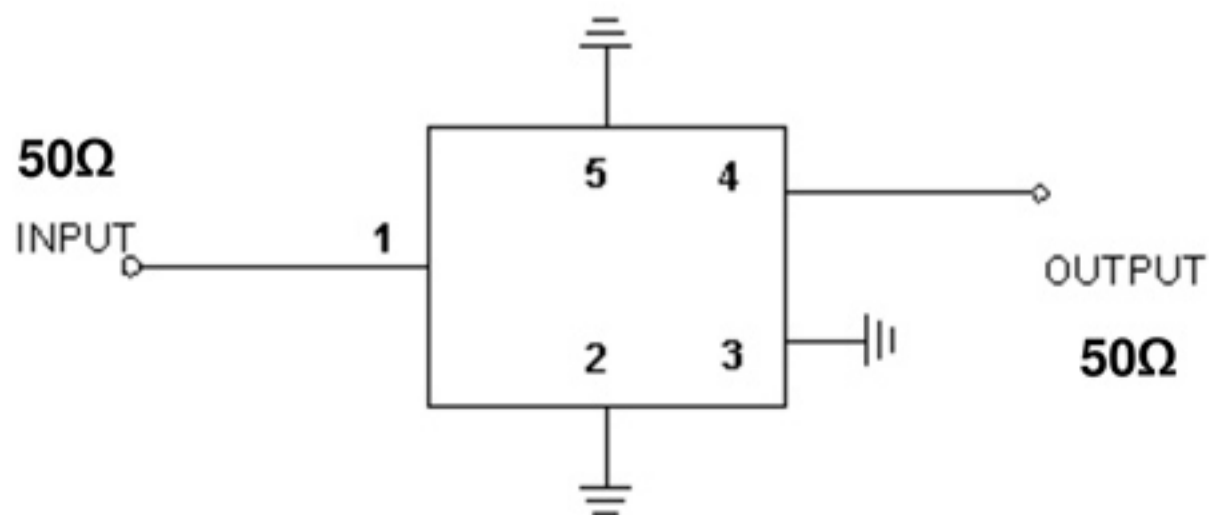


### S22

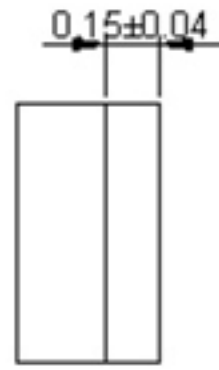
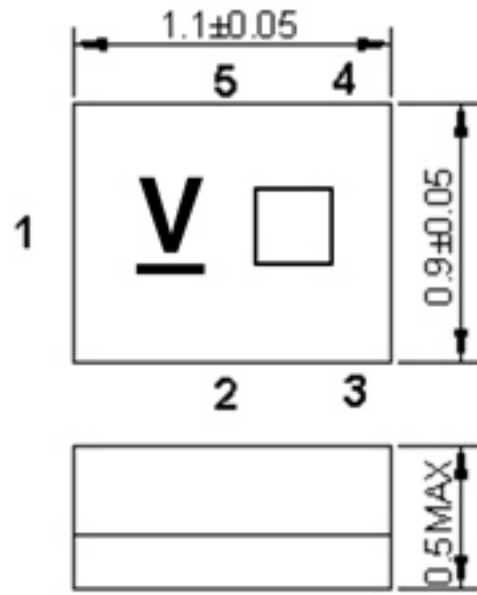


## D. MEASUREMENT CIRCUIT:

- (1): Unbalance Port
- (4): Unbalance Port
- Others: Ground

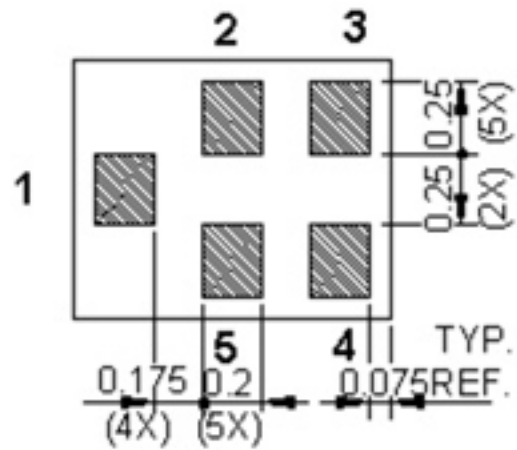


**E. OUTLINE DRAWING:**



All tolerances are +/-0.05 mm unless otherwise specified  
Coplanarity : 0.1 mm max.

1 to 5 : Pin No.  
Unit : mm

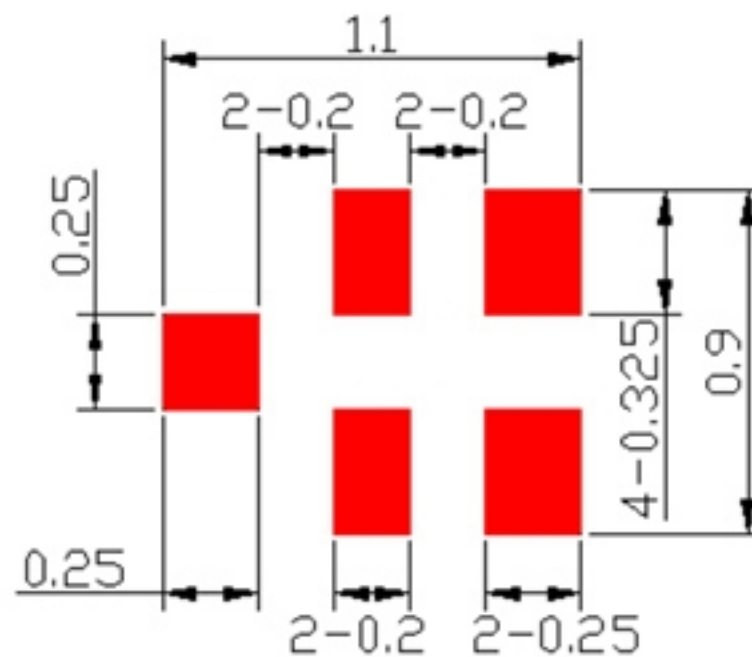


Pin No.	Symbol	Function
1	IN	Input
2	GND	Ground
3	GND	Ground
4	OUT	Output
5	GND	Ground

□ : Year/Month Code (Follow the table)

YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013	A	B	C	D	E	F	G	H	J	K	L	M
2014	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
2018	<u>N</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>T</u>	<u>U</u>	<u>V</u>	<u>W</u>	<u>X</u>	<u>Y</u>	<u>Z</u>
2019	<u>a</u>	<u>b</u>	<u>c</u>	<u>d</u>	<u>e</u>	<u>f</u>	<u>g</u>	<u>h</u>	<u>i</u>	<u>k</u>	<u>l</u>	<u>m</u>
2020	<u>n</u>	<u>p</u>	<u>q</u>	<u>r</u>	<u>s</u>	<u>t</u>	<u>u</u>	<u>v</u>	<u>w</u>	<u>x</u>	<u>y</u>	<u>z</u>

**F. PCB Footprint :**



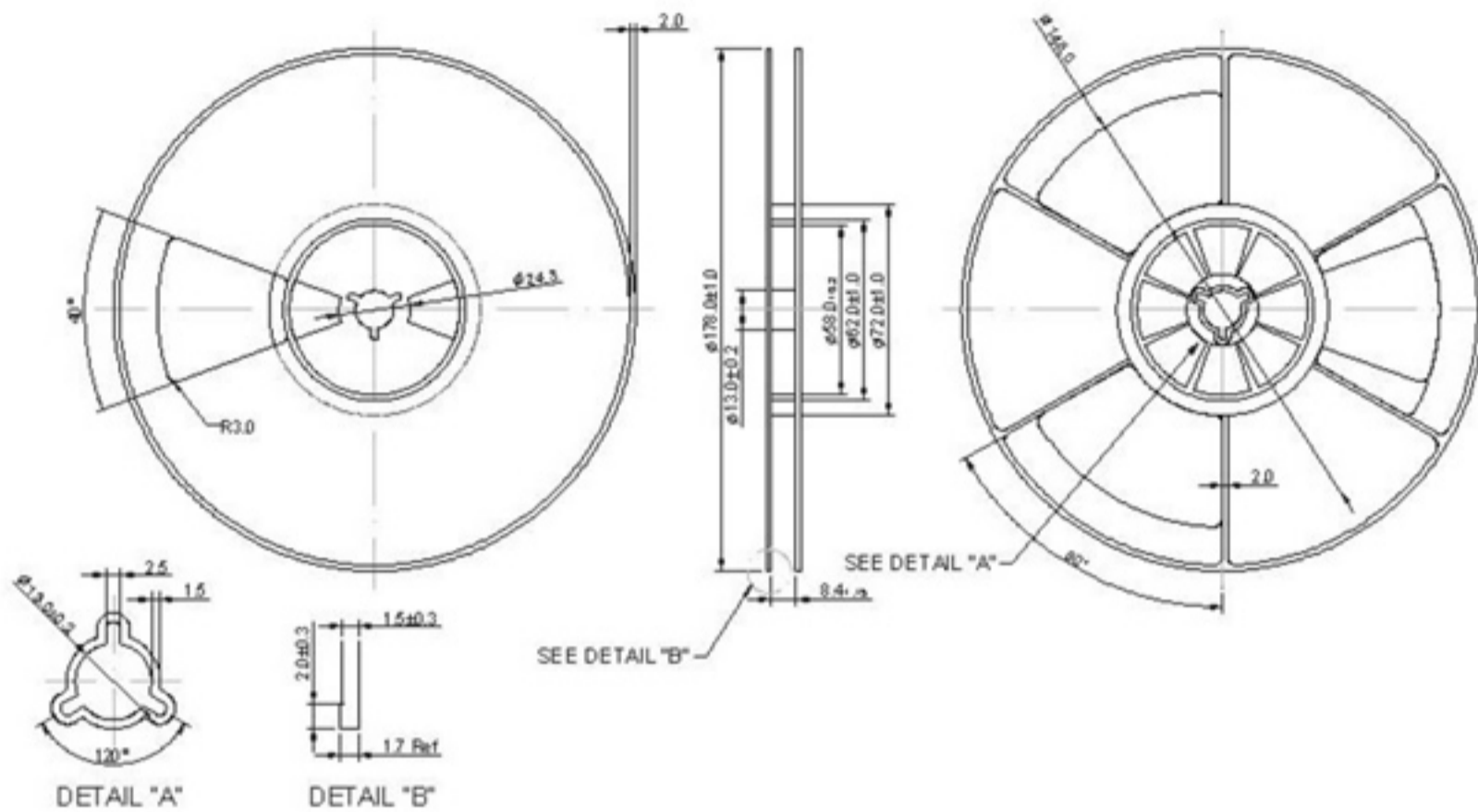
■ : Land Pattern

Unit: mm

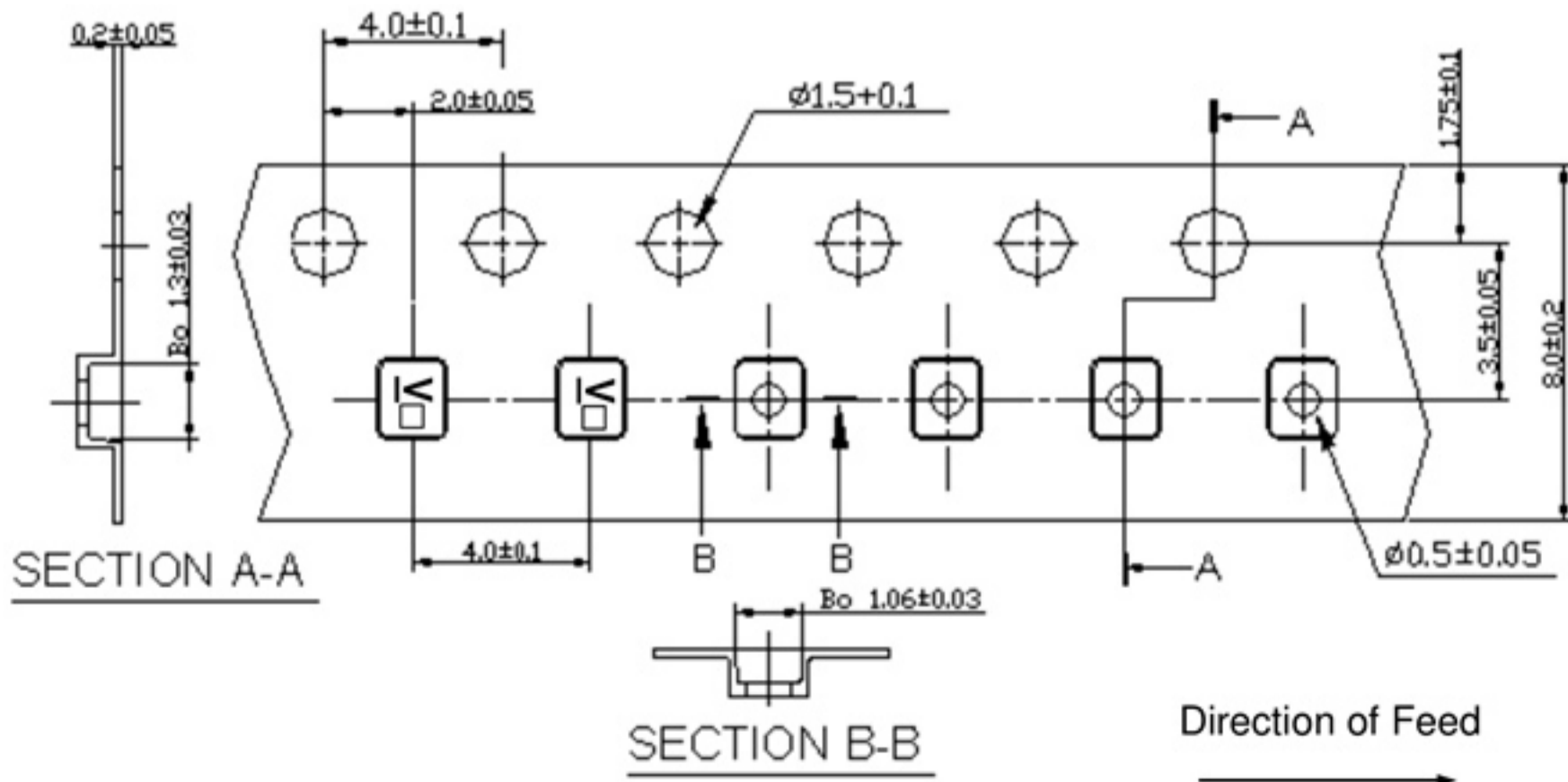
## G. PACKING: (Ref. WI-75M03)

### 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  $60\sim 90$  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  $50\sim 80$  seconds and at  $260^{\circ}\text{C} + 0/-5^{\circ}\text{C}$  peak ( $20\sim 40$ sec).
4. Time: 2 times.

