

# SAW Filter 867.5 MHz

MODEL NO.: TA1735B

REV. NO.:1

## A. MAXIMUM RATING:

1. Input Power Level: 10 dB<sub>m</sub>
2. DC voltage: 3 V
3. Operating Temperature: -30°C to +80°C
4. Storage Temperature: -40°C to +95°C
5. Moisture Sensitivity Level: Level 1(**MSL1**)

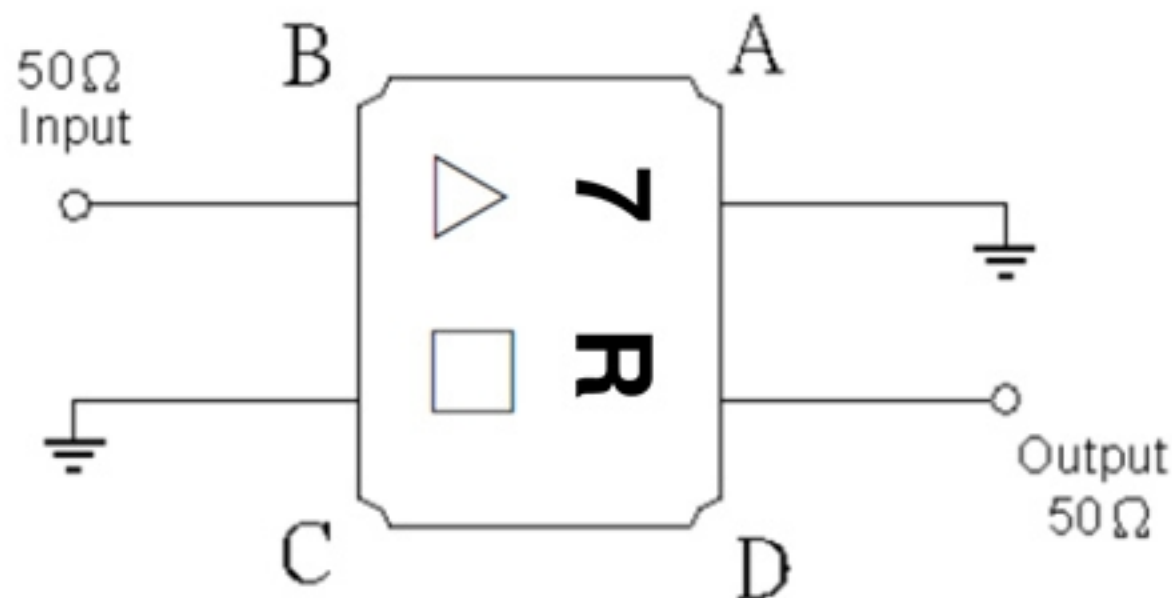
RoHS Compliant  
Lead free  
Lead-free soldering

Electrostatic Sensitive Device (**ESD**)

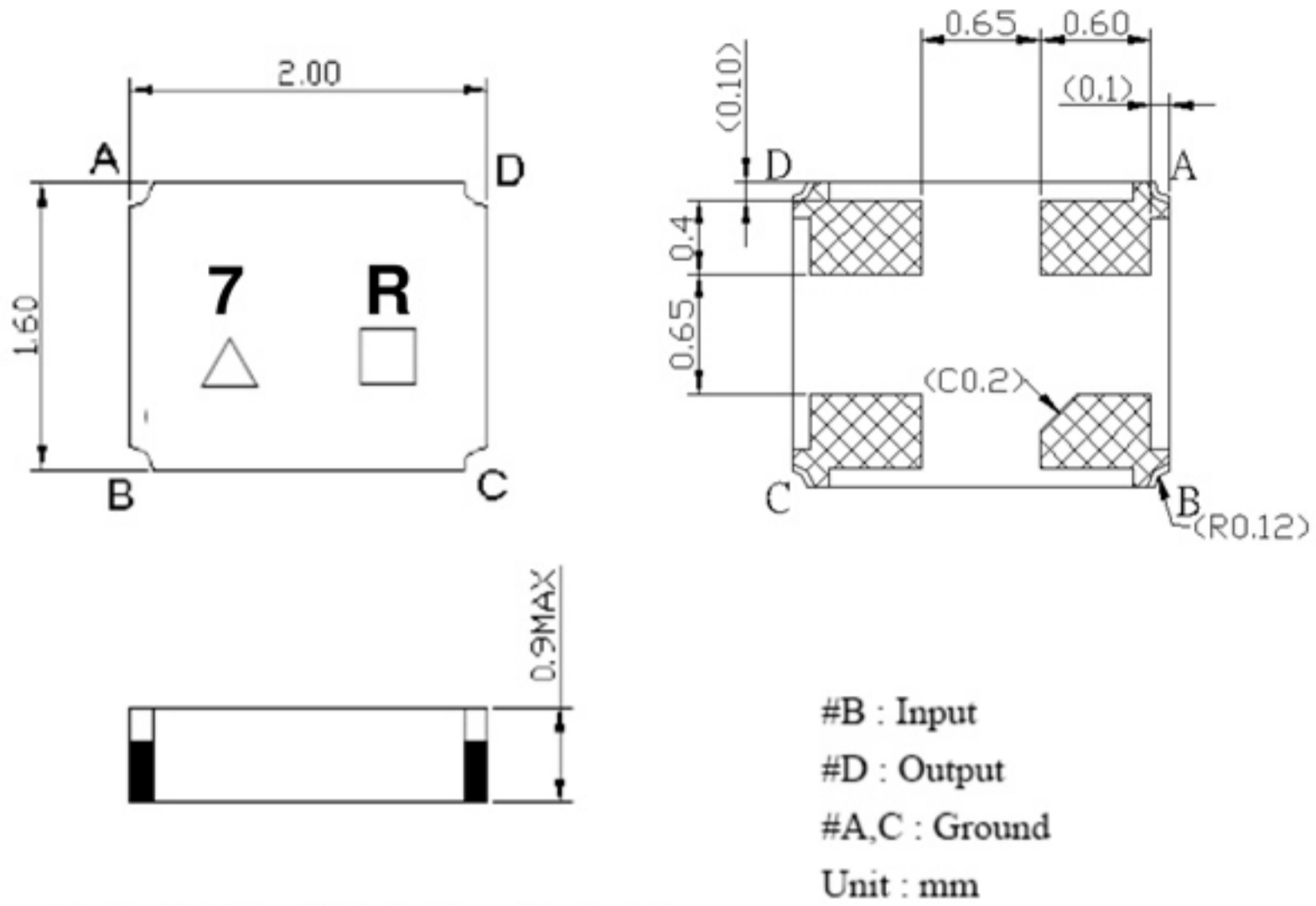
## B. ELECTRICAL CHARACTERISTICS:

Item		Unit	Min.	Typ.	Max.
<b>Center frequency</b>	<b>F<sub>c</sub></b>	MHz	-	867.5	-
<b>Insertion loss (860~875 MHz)</b>	<b>IL</b>	dB	-	2.2	3.2
<b>Amplitude ripple (860~875 MHz)</b>		dB	-	0.3	1.5
<b>VSWR (860~875 MHz)</b>		-	-	1.4	2
<b>Attenuation (Reference level from 0 dB)</b>					
100 ~ 815 MHz		dB	40	50	-
815 ~ 830 MHz		dB	38	47	-
898 ~ 901 MHz		dB	15	26	-
915 ~ 925 MHz		dB	30	44	-
925 ~ 2330 MHz		dB	28	41	-
2330 ~ 2000 MHz		dB	20	33	-
<b>Source impedance</b>	<b>Z<sub>s</sub></b>	Ω	-	50	-
<b>Load impedance</b>	<b>Z<sub>L</sub></b>	Ω	-	50	-
<b>Temperature Coefficient of Frequency</b>		Ppm/°C	-	-36	-

## C. MEASUREMENT CIRCUIT:



**D. OUTLINE DRAWING:**



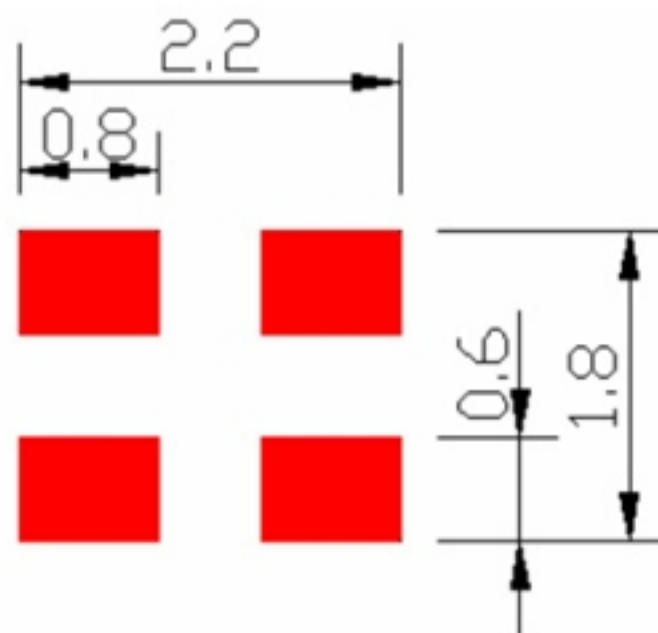
△: Year Code (2010->0, 2011->1, ..., 2019->9)

□: Date Code

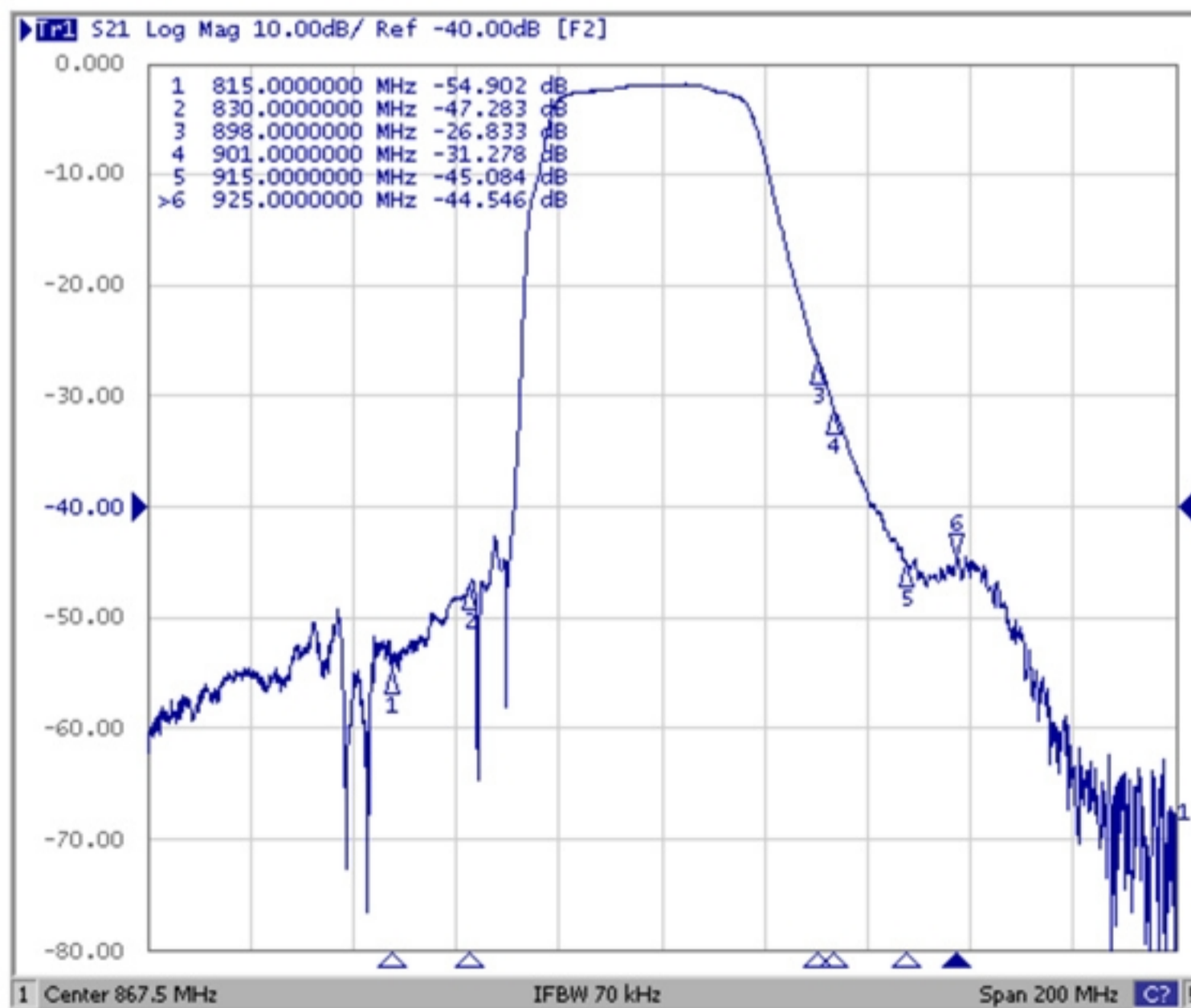
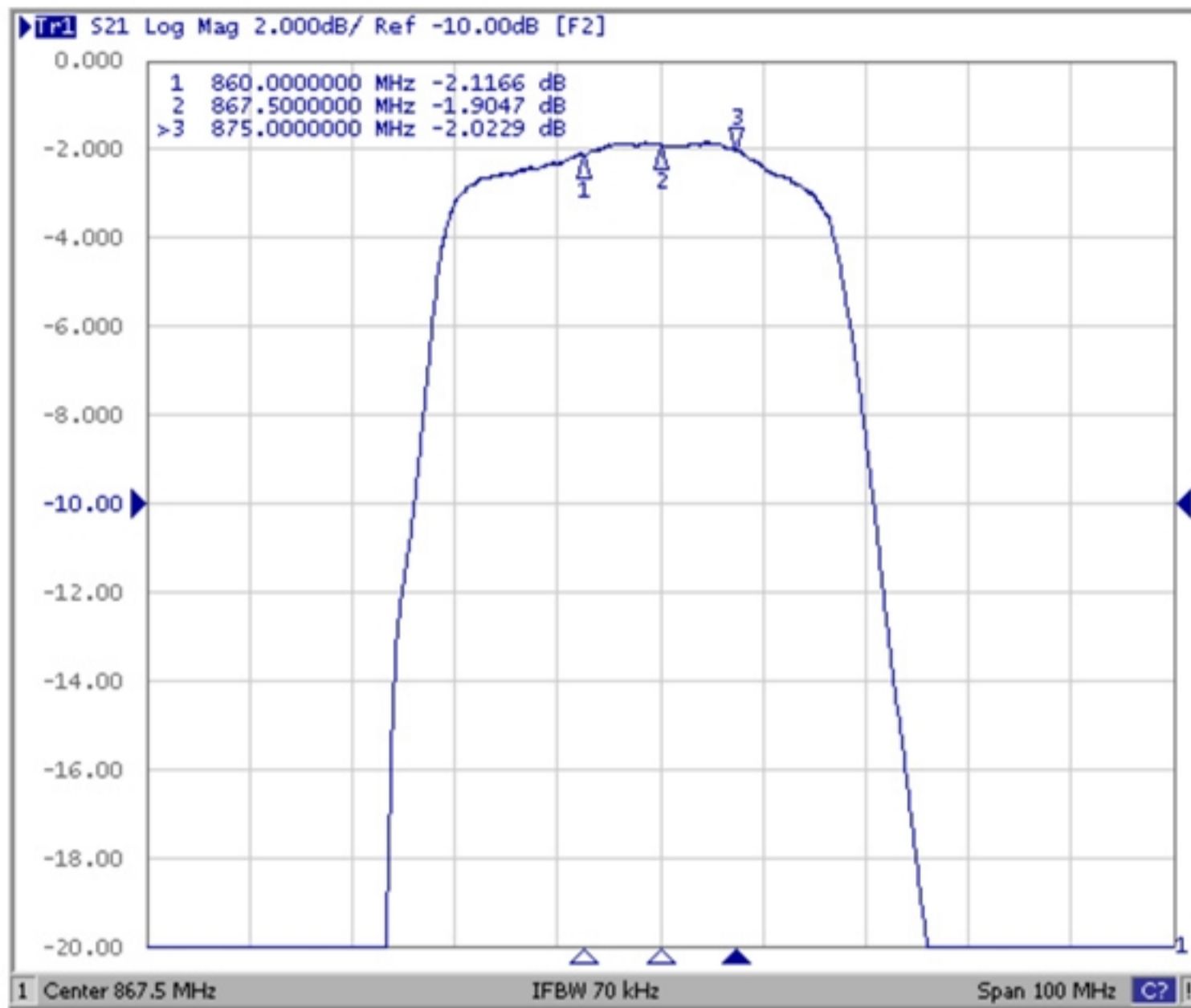
**Date Code Table:**

WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

**E. PCB Footprint:**



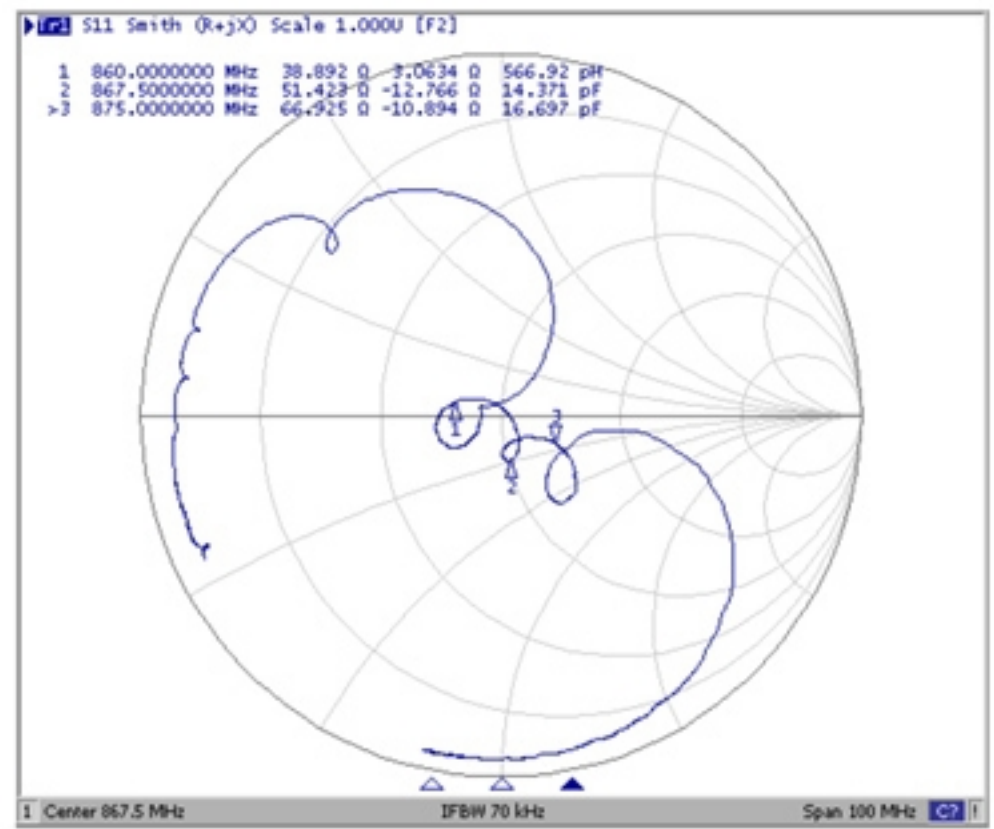
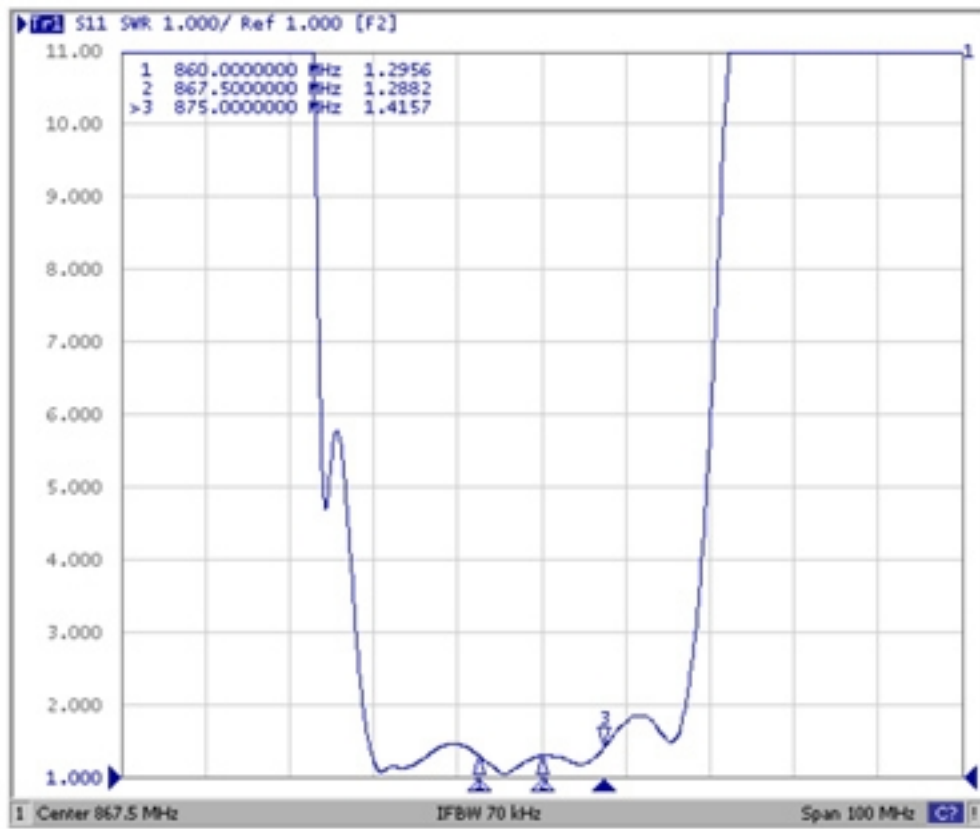
## F. Frequency Characteristics: Transfer function



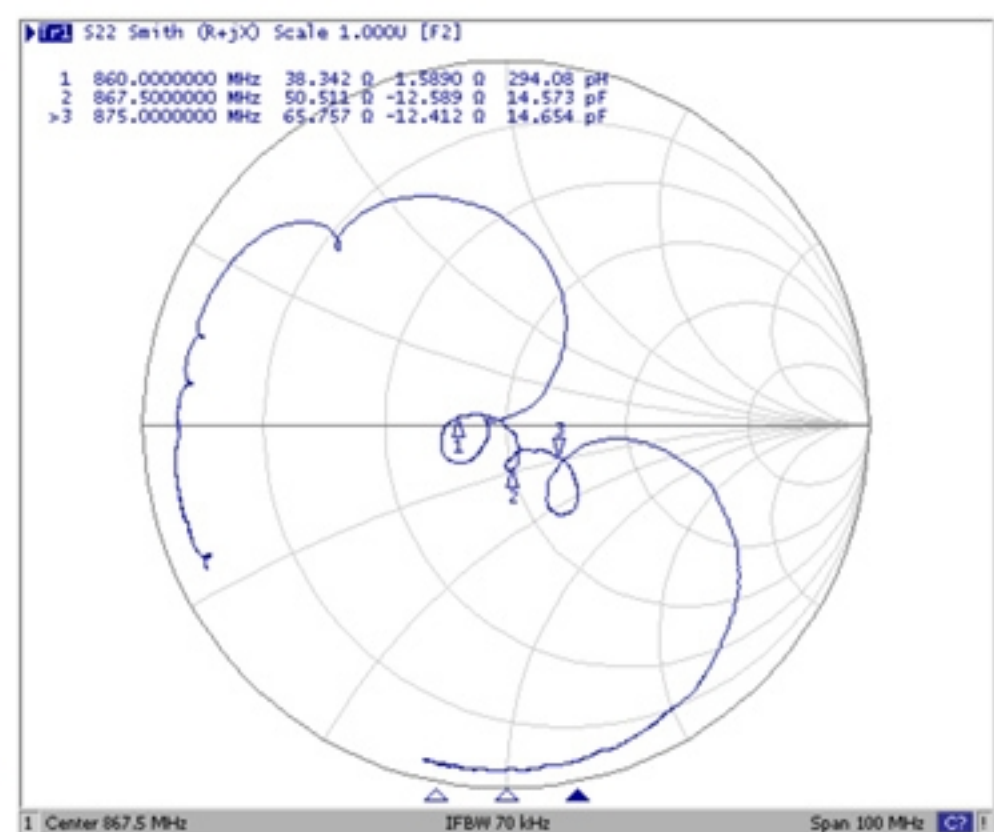
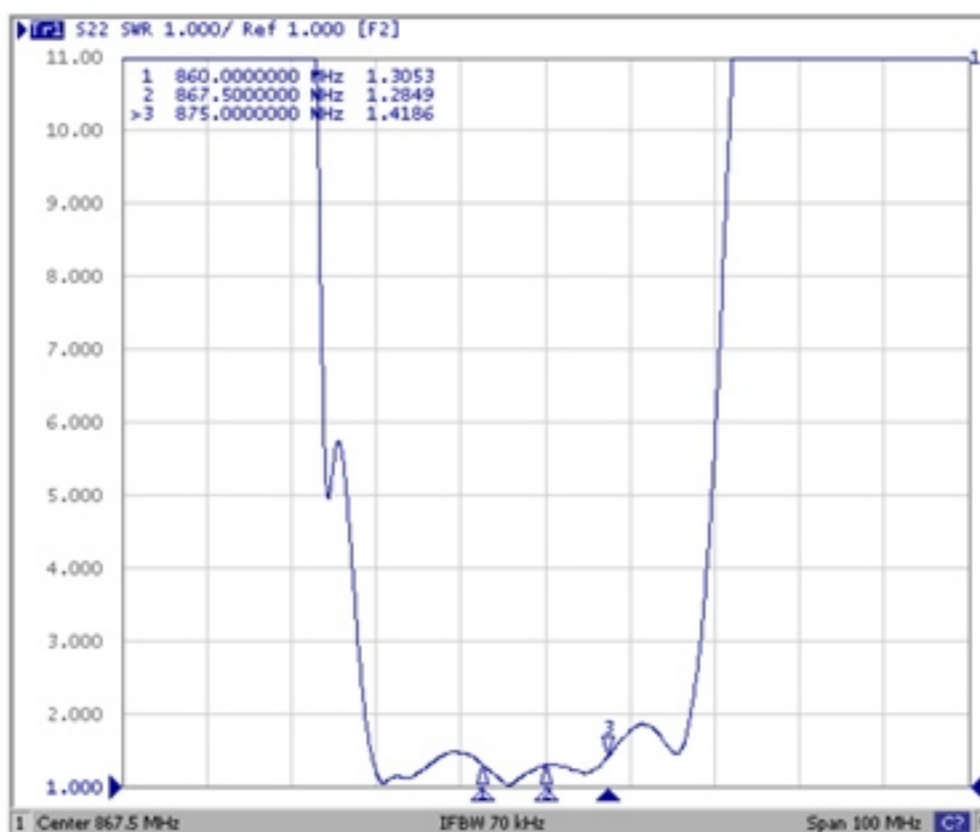


## Reflections Functions:

### S11 VSWR



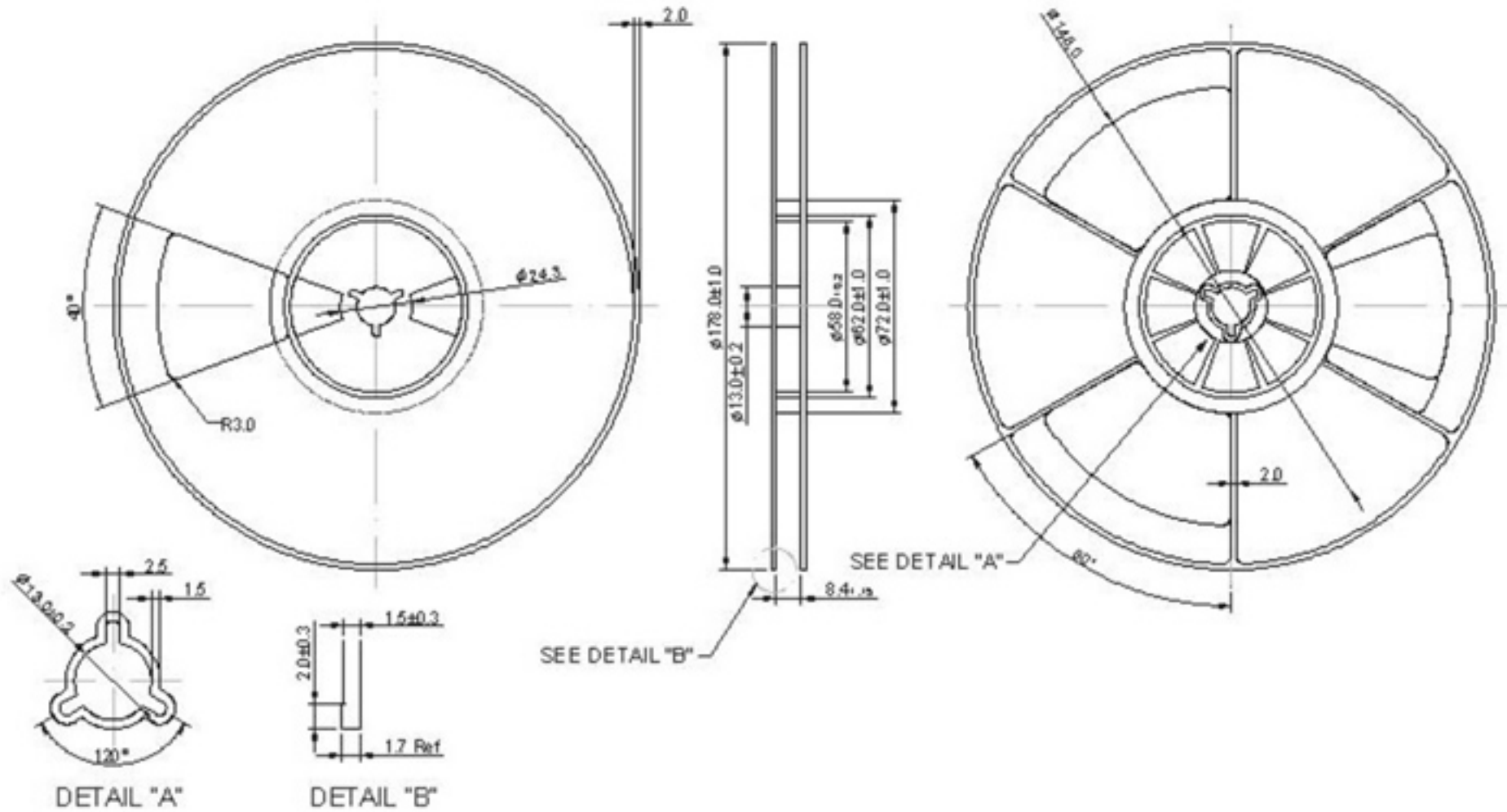
### S22 VSWR



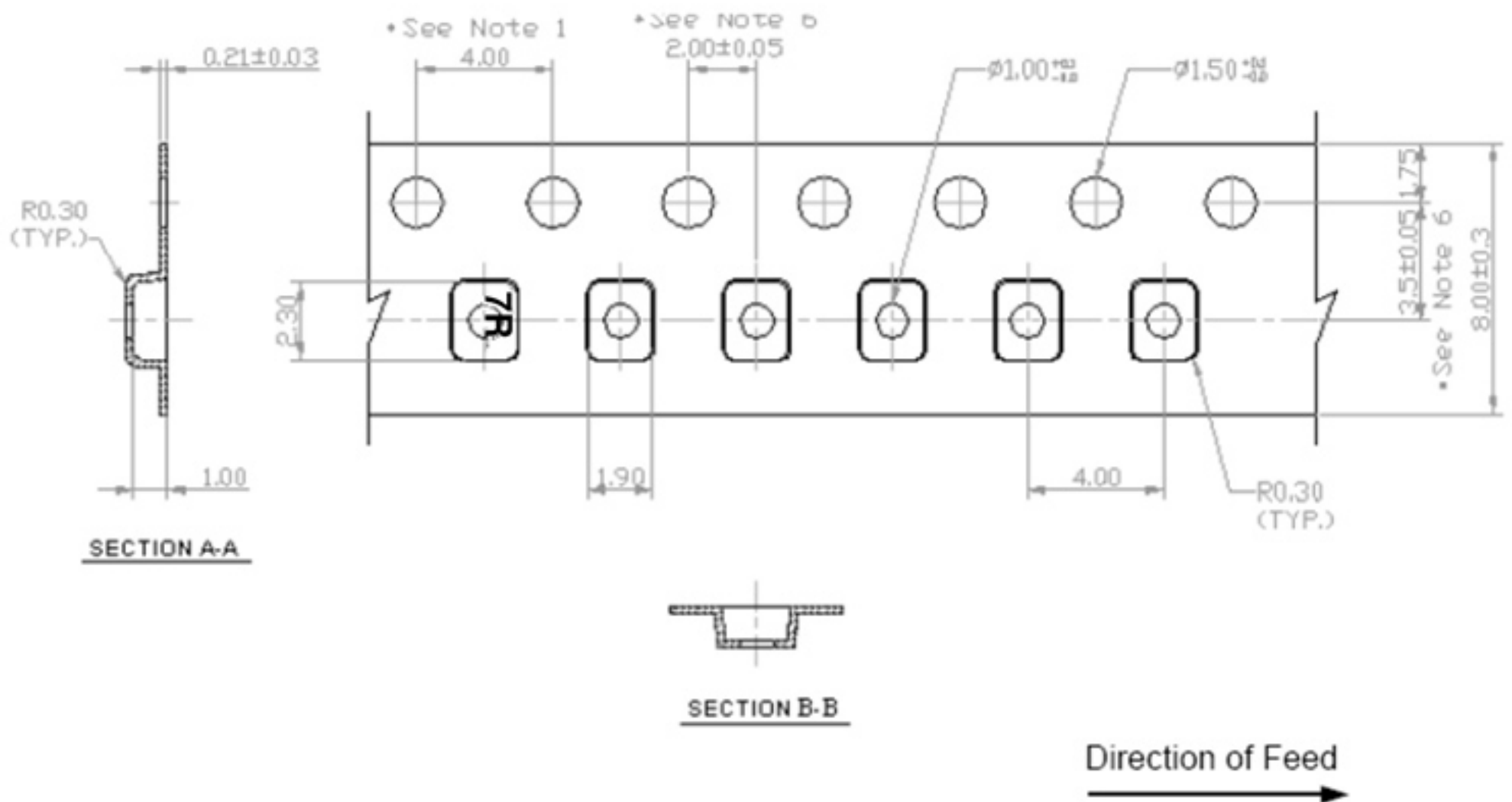
**G. PACKING: (Ref. WI-75M03)**

**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 ( $20\sim 40\text{sec}$ ).
4. Time: 2 times.

