

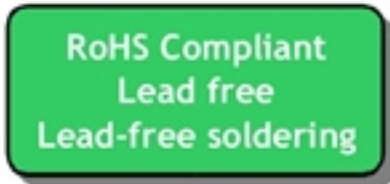
# 1223/ 1582.5 MHz SAW Diplexer

MODEL NO.: TE0137A

REV. NO.:1

## A. MAXIMUM RATING:

- 1.Input Power Level: 10 dB<sub>m</sub>
- 2.DC voltage: 6 V
- 3.Operating Temperature: -40°C to +85°C
- 4.Storage Temperature: -40°C to +95°C
- 5.Moisture Sensitivity Level: Level 1(**MSL1**)



**Electrostatic Sensitive Device (ESD)**

## B. ELECTRICAL CHARACTERISTICS:

(L2\_1223 MHz)

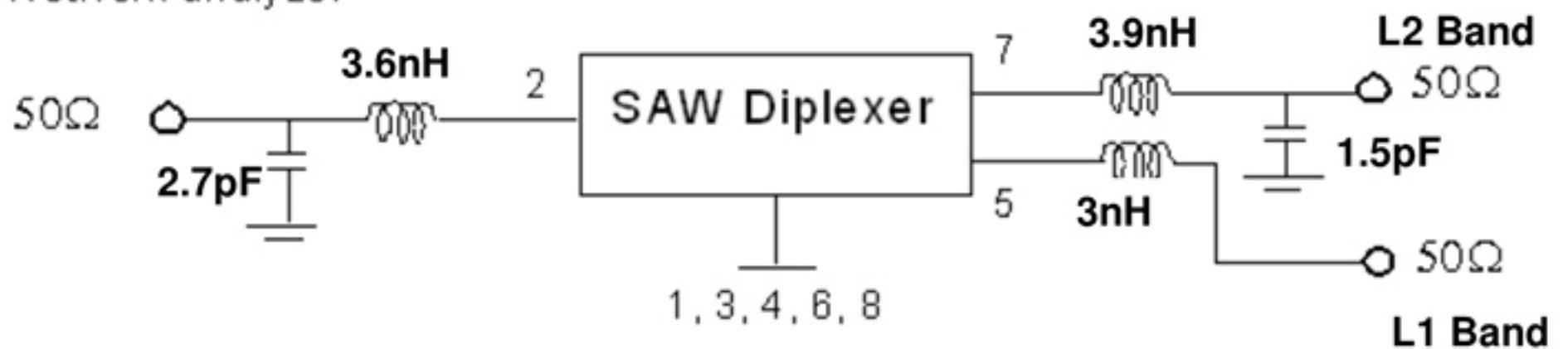
Item	Unit	Min.	Typ.	Max.	
<b>Center frequency</b> <b>Fc</b>	MHz	-	1223	-	
<b>Insertion Loss</b> (1197~1249 MHz) <b>IL</b>	dB	-	3.5	5.2	
<b>Group Delay Variation</b> (1197~1249 MHz)	ns	-	7	25	
<b>Group Delay Variation</b> (1197~1217 MHz)	ns	-	6	25	
<b>Group Delay Variation</b> (1217~1237 MHz)	ns	-	4	10	
<b>Group Delay Variation</b> (1242~1249 MHz)	ns	-	2	10	
<b>Attenuation</b> (Reference level from 0 dB)					
880 ~ 920 MHz	dB	45	50	-	
1710 ~ 1785 MHz	dB	30	36	-	
1850 ~ 1910 MHz	dB	38	44	-	
1920 ~ 1980 MHz	dB	34	46	-	
2400 ~ 2500 MHz	dB	35	40	-	

(L1\_1582.5 MHz)

Item	Unit	Min.	Typ.	Max.	
Center frequency	Fc	MHz	-	1582.5	-
Insertion Loss (1559~1606 MHz)	IL	dB	-	4.2	4.8
Group Delay Variation (1559~1606 MHz)	ns	-	7	15	
Group Delay Variation (1559~1563 MHz)	ns	-	3	15	
Group Delay Variation (1565~1585 MHz)	ns	-	3	10	
Group Delay Variation (1598~1606 MHz)	ns	-	2	10	
<b>Attenuation</b> (Reference level from 0 dB)					
880 ~ 920 MHz	dB	40	60	-	
1710 ~ 1785 MHz	dB	30	35	-	
1850 ~ 1910 MHz	dB	34	39	-	
1920 ~ 1980 MHz	dB	36	41	-	
2400 ~ 2500 MHz	dB	35	44	-	

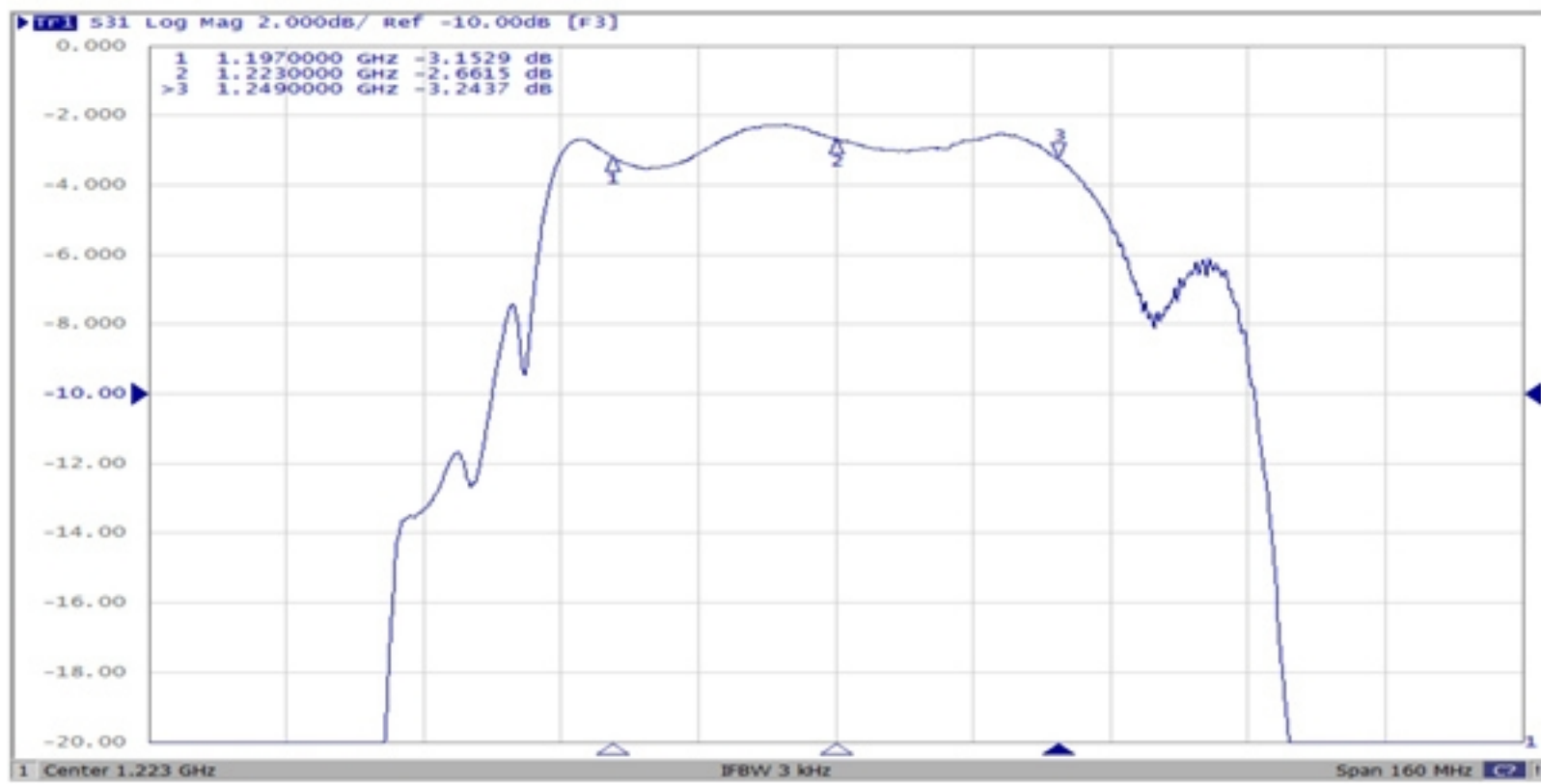
### C. MEASUREMENT CIRCUIT:

HP Network analyzer

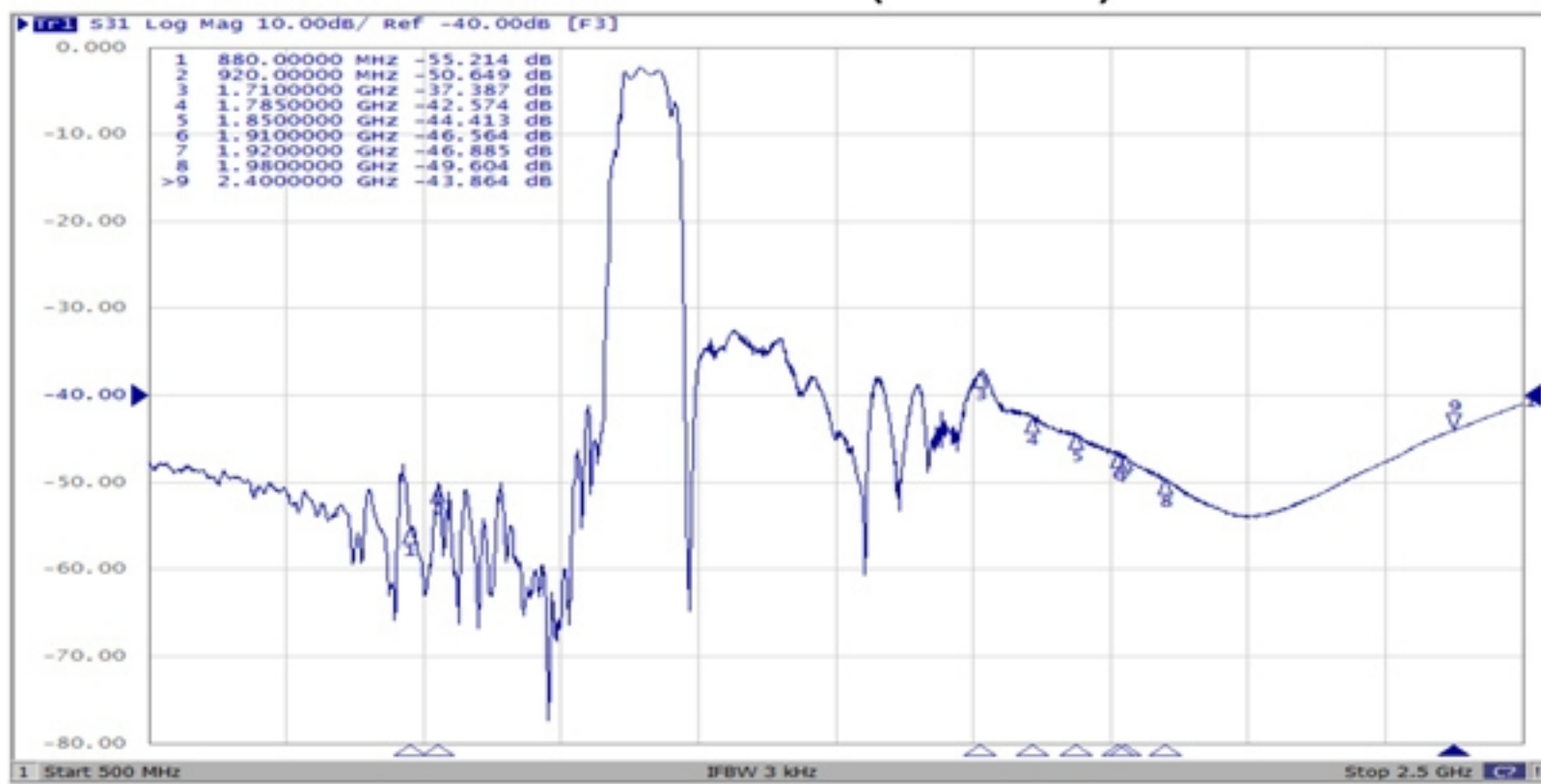


## D. Frequency Characteristics:

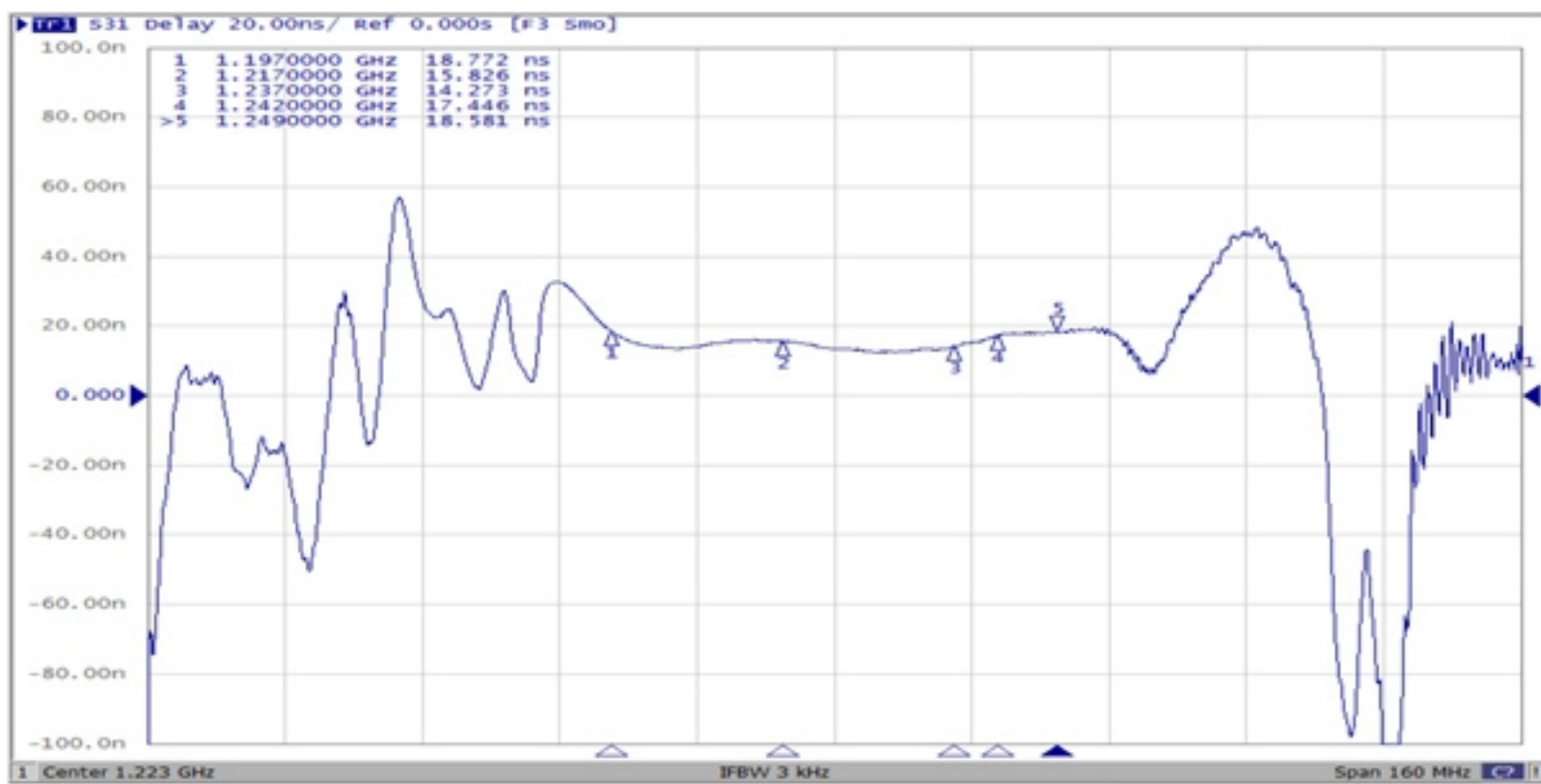
### L2 Characteristics



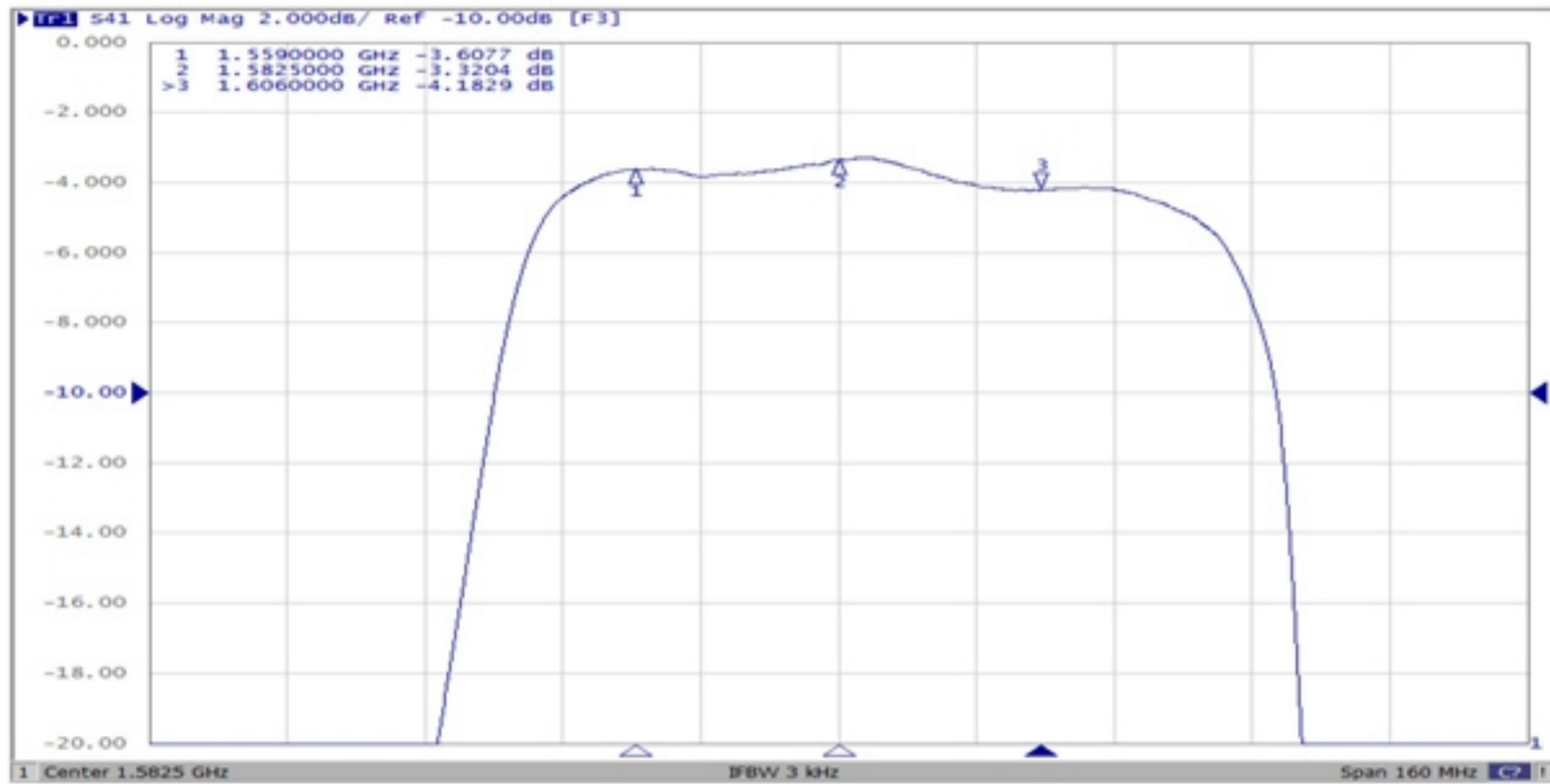
### L2 Characteristics (wideband)



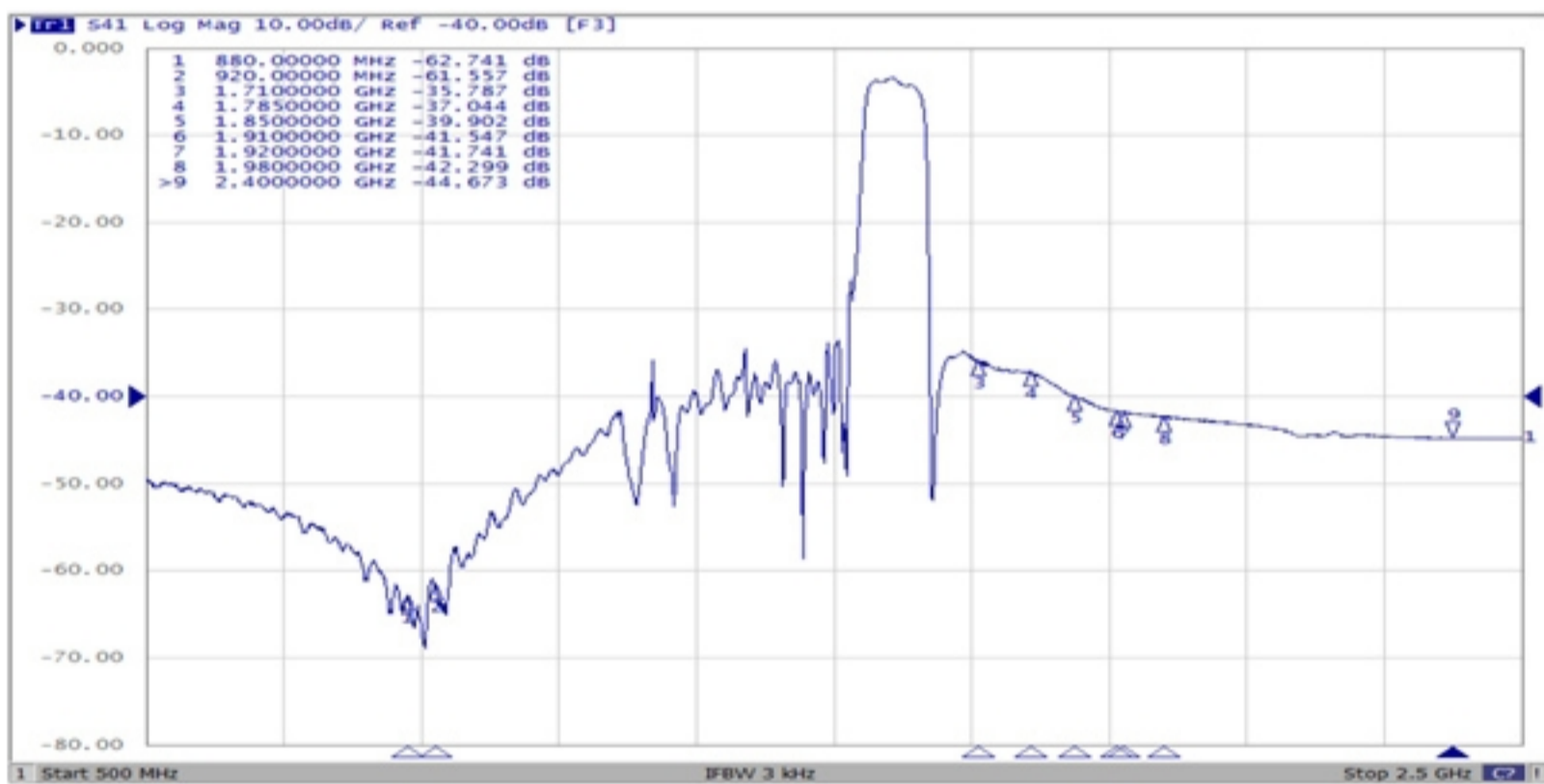
### L2 Group Delay



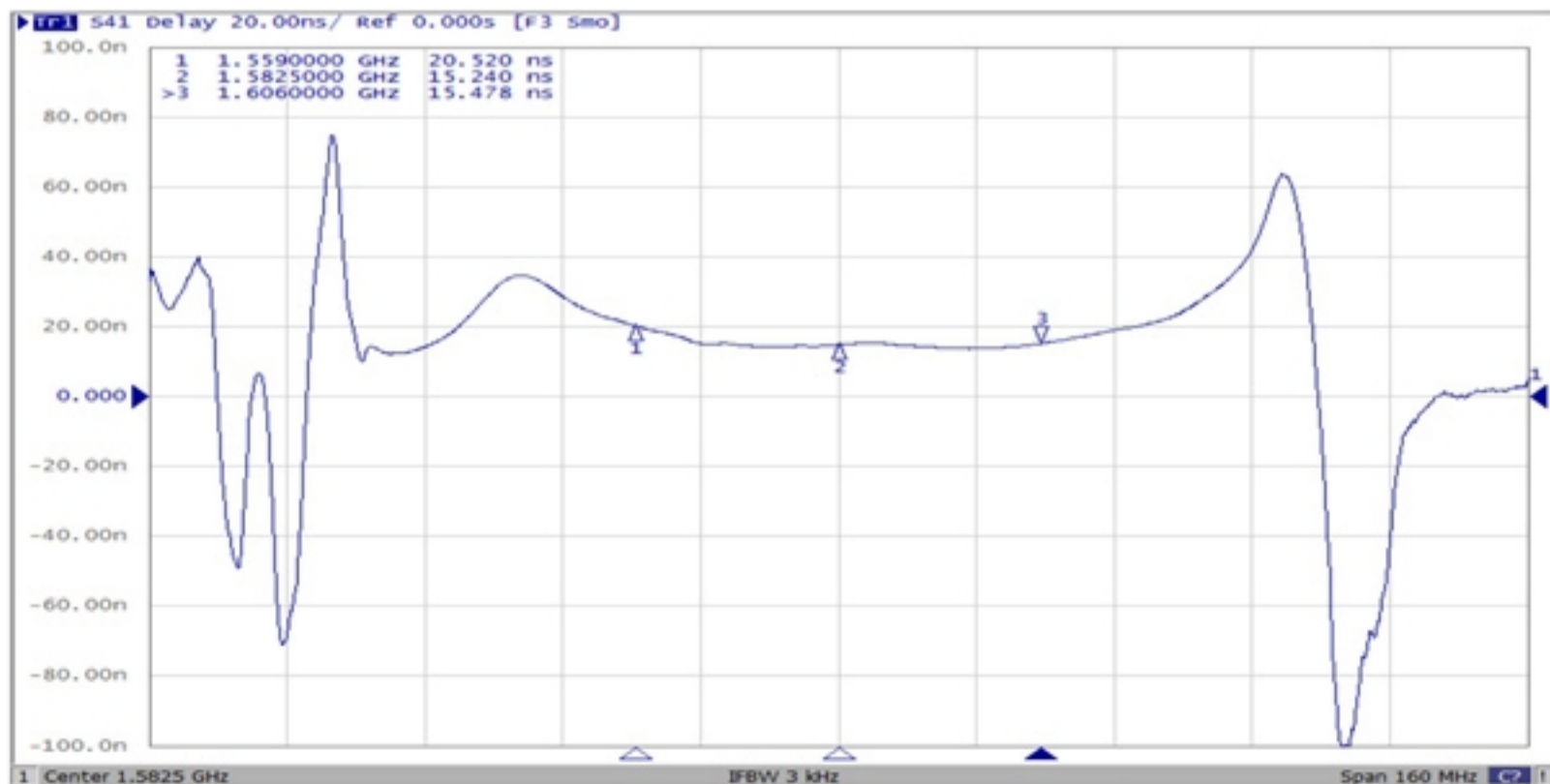
## L1 Characteristics



## L1 Characteristics (wideband)



## L1 Group Delay



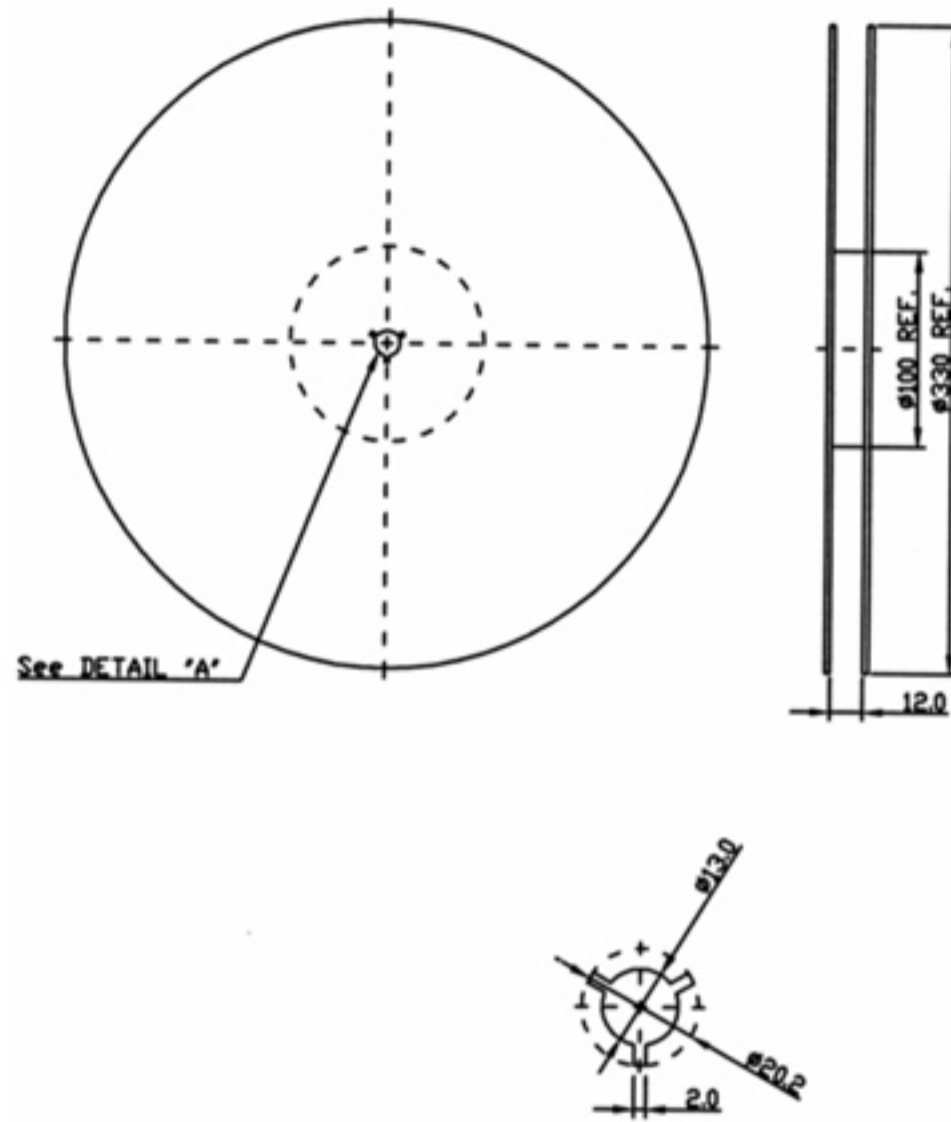




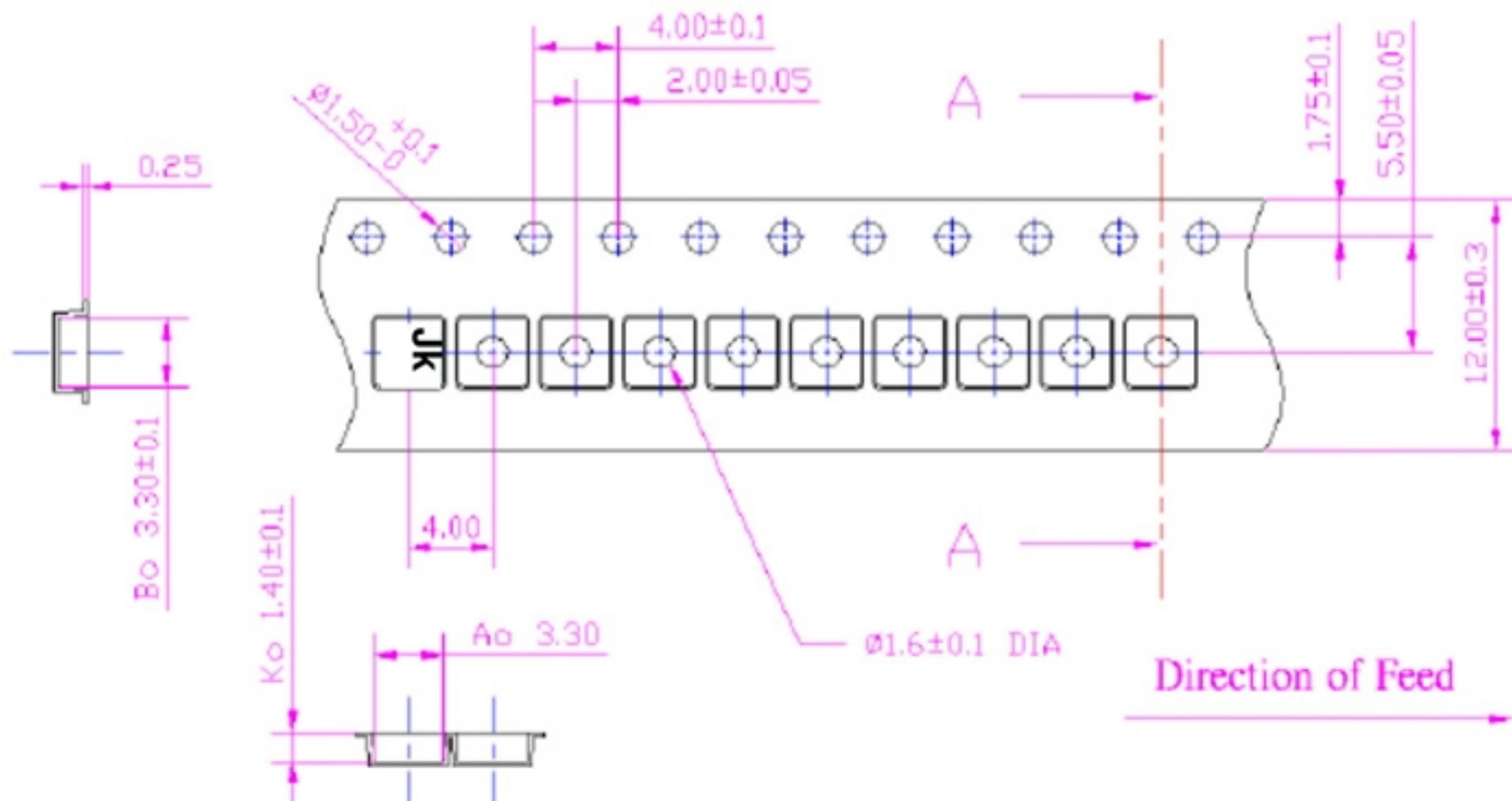
### G. PACKING: (Ref. WI-75M03)

#### 1. REEL DIMENSION

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



#### 2. TAPE DIMENSION



### H. Recommended Reflow Profile:

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

