

Dual SAW Diplexer Filter 433.2/434.64 MHz

MODEL NO.:TF0097A

REV. NO.:2

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 0 V
3. Operating Temperature: -40 °C to +85 °C
4. Storage Temperature: -40 °C to +85 °C
5. AEC-Q200
- 6.

RoHS Compliant
Lead free
Lead-free soldering

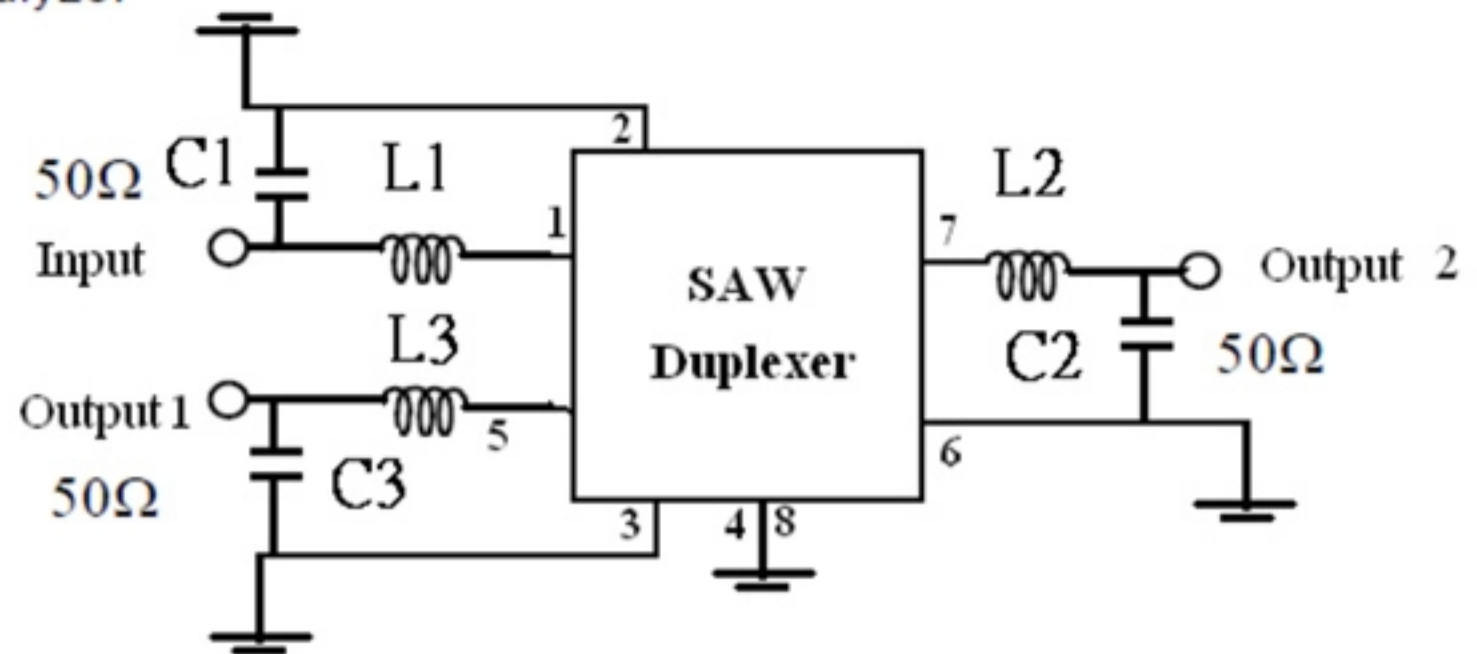
Electrostatic Sensitive Device (ESD)

B_1. ELECTRICAL CHARACTERISTICS:

Pass Band I	Unit	Min.	Type.	Max.
Center frequency Fc	MHz	-	433.2	-
Insertion loss (433.10~433.30 MHz) IL	dB	-	4	4.5
Amplitude Ripple (433.10~433.30 MHz)	dB	-	1	1.5
VSWR (433.10~433.30 MHz)			2	2.3
Attenuation (Reference level from 0 dB)				
434.54 ~ 434.74 MHz	dB	25	30	-
Fc + 2.4 MHz	dB	25	30	-
Fc - 2.4 MHz	dB	25	30	-
Pass Band II				
Center frequency Fc	MHz	-	434.64	-
Insertion loss (434.54~434.74 MHz) IL	dB	-	4	4.5
Amplitude Ripple (434.54~434.74 MHz)	dB	-	1	1.5
VSWR (434.54~434.74 MHz)			2	2.3
Attenuation (Reference level from 0 dB)				
433.10 ~ 433.30 MHz	dB	25	30	-
Fc + 2.4 MHz	dB	30	35	-
Fc - 2.4 MHz	dB	30	35	-

C. MEASUREMENT CIRCUIT:

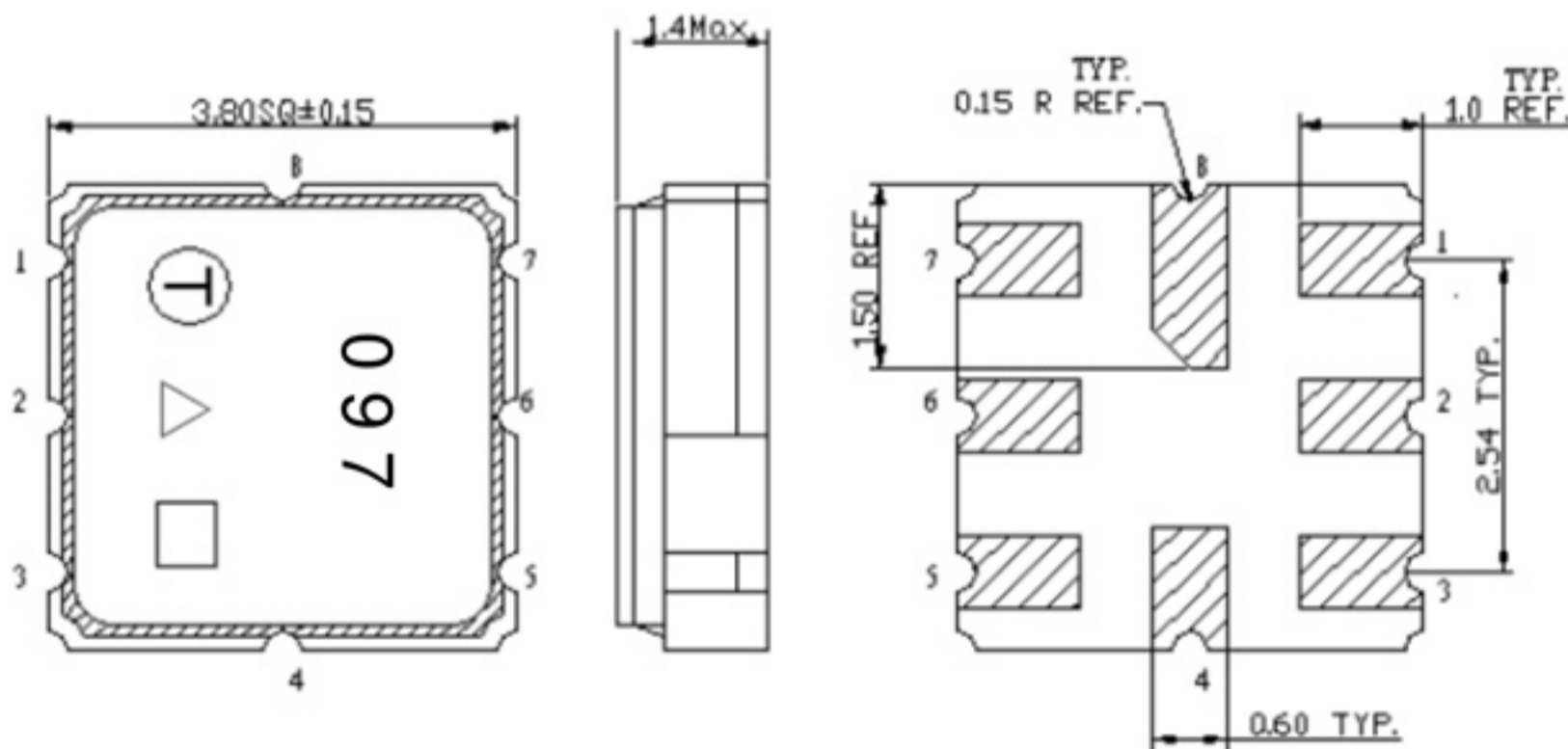
HP Network analyzer



L1 : 68nH; L2 : 82nH ; L3 : 82nH ;

C1 : 8pF ; C2 : 5pF ; C3 : 5pF ;

D. OUTLINE DRAWING:



Electrical Connections

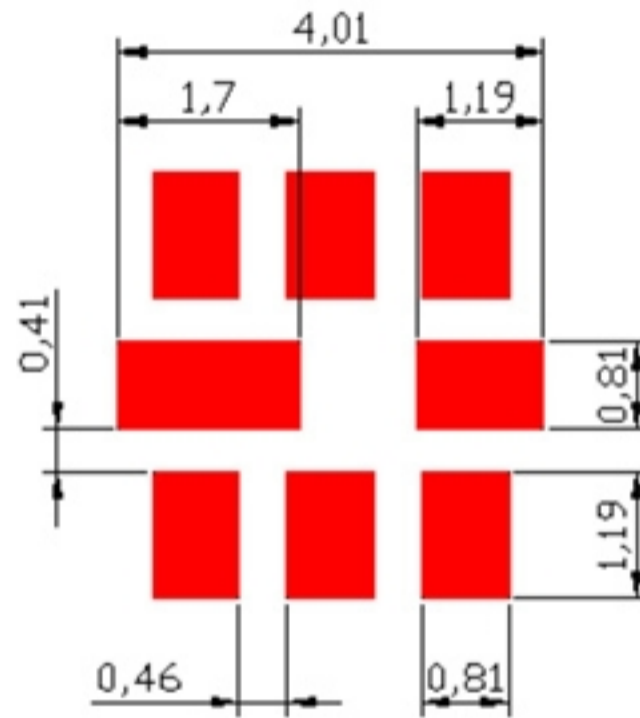
Pin	Connection
1	Input
2,3,6	RF Ground
4,8	Case Ground
5	Band 1 Output
7	Band 2 Output
Dot Indicates Pin 1	

□ : Week Code(Follow the table from planner each year)

△ : Product / Year Code

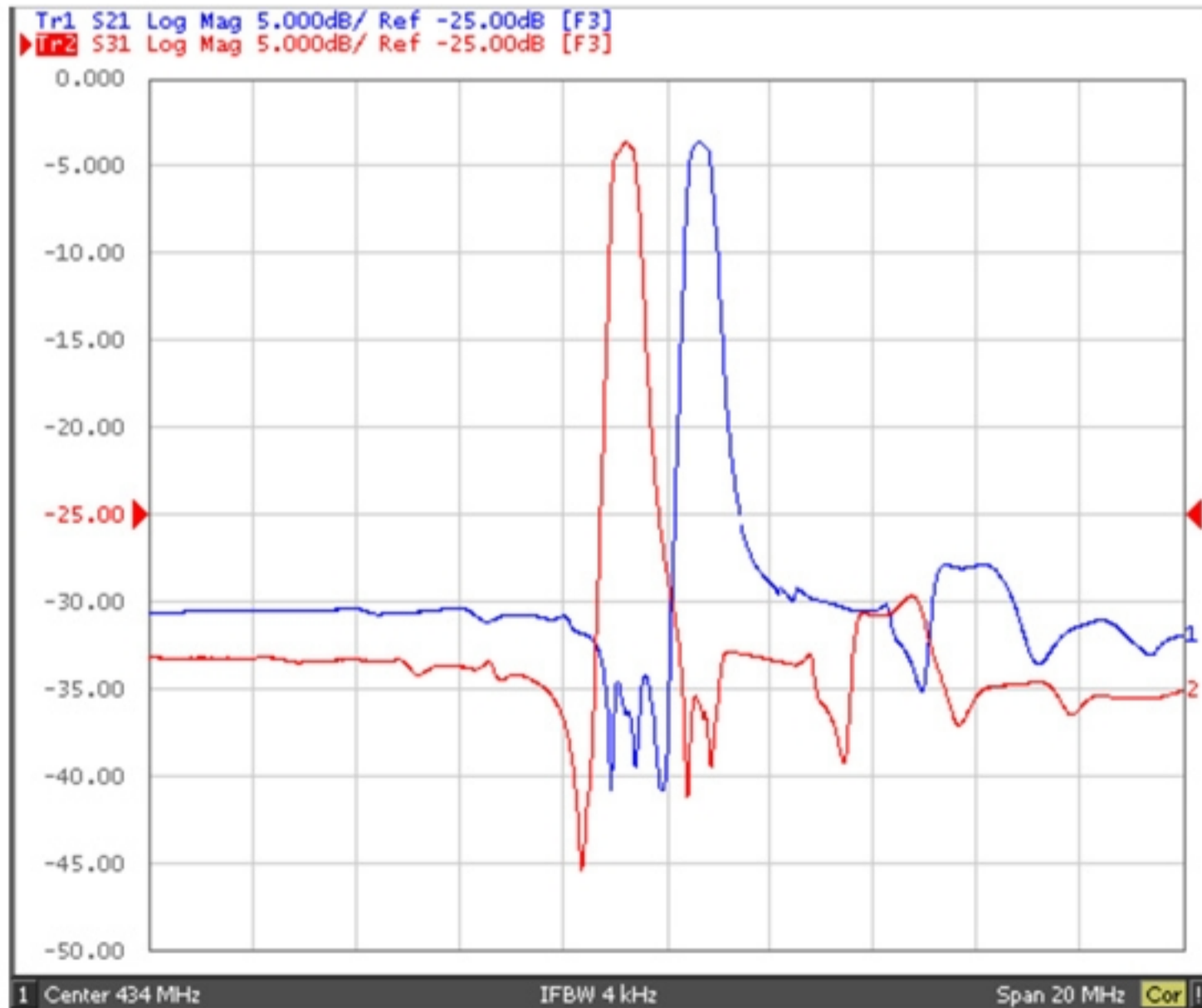
Year	2013 2009	2014 2010	2015 2011	2016 2012
Product Code	F	f	E	f

E. PCB Footprint:

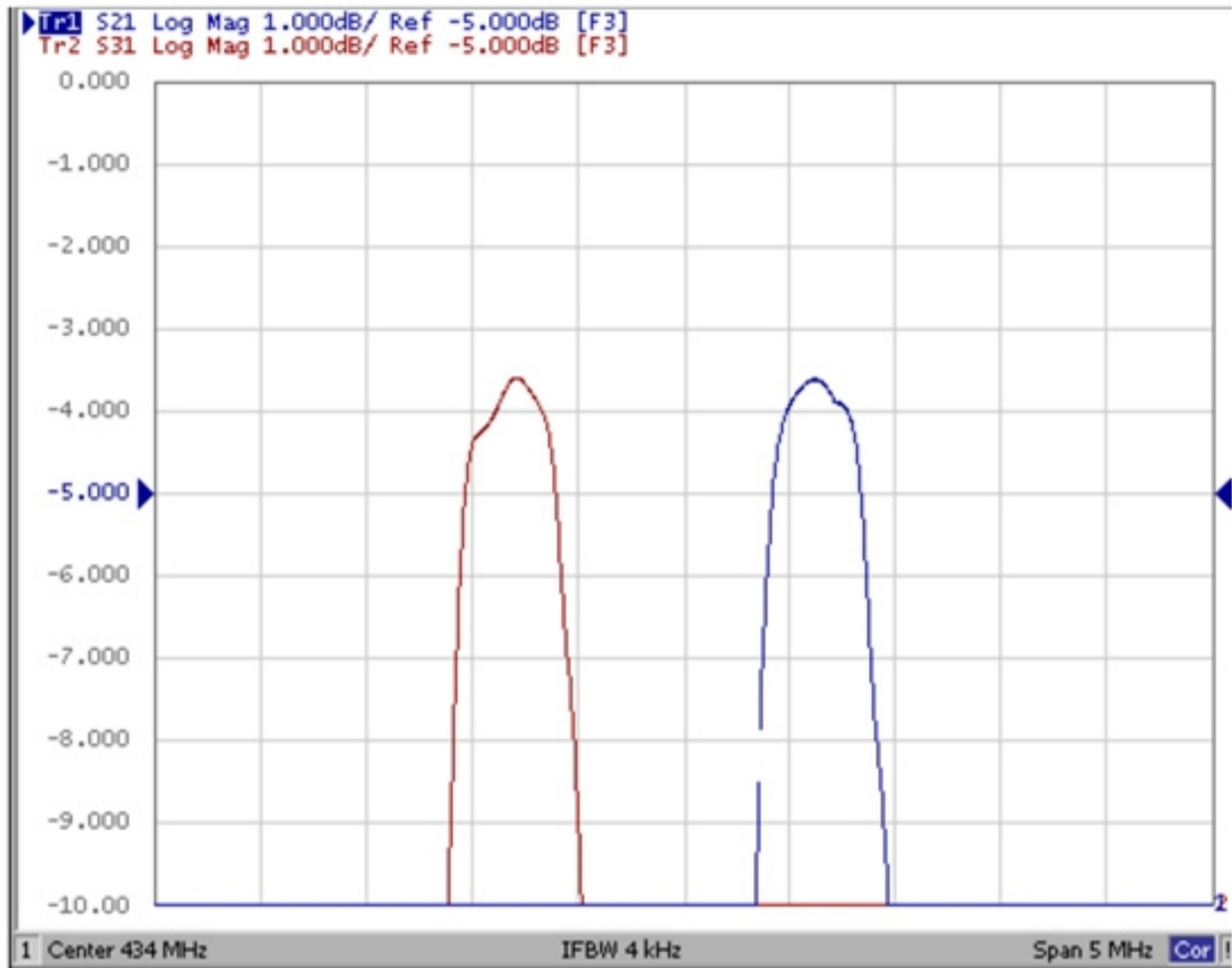


F. Frequency Characteristics :

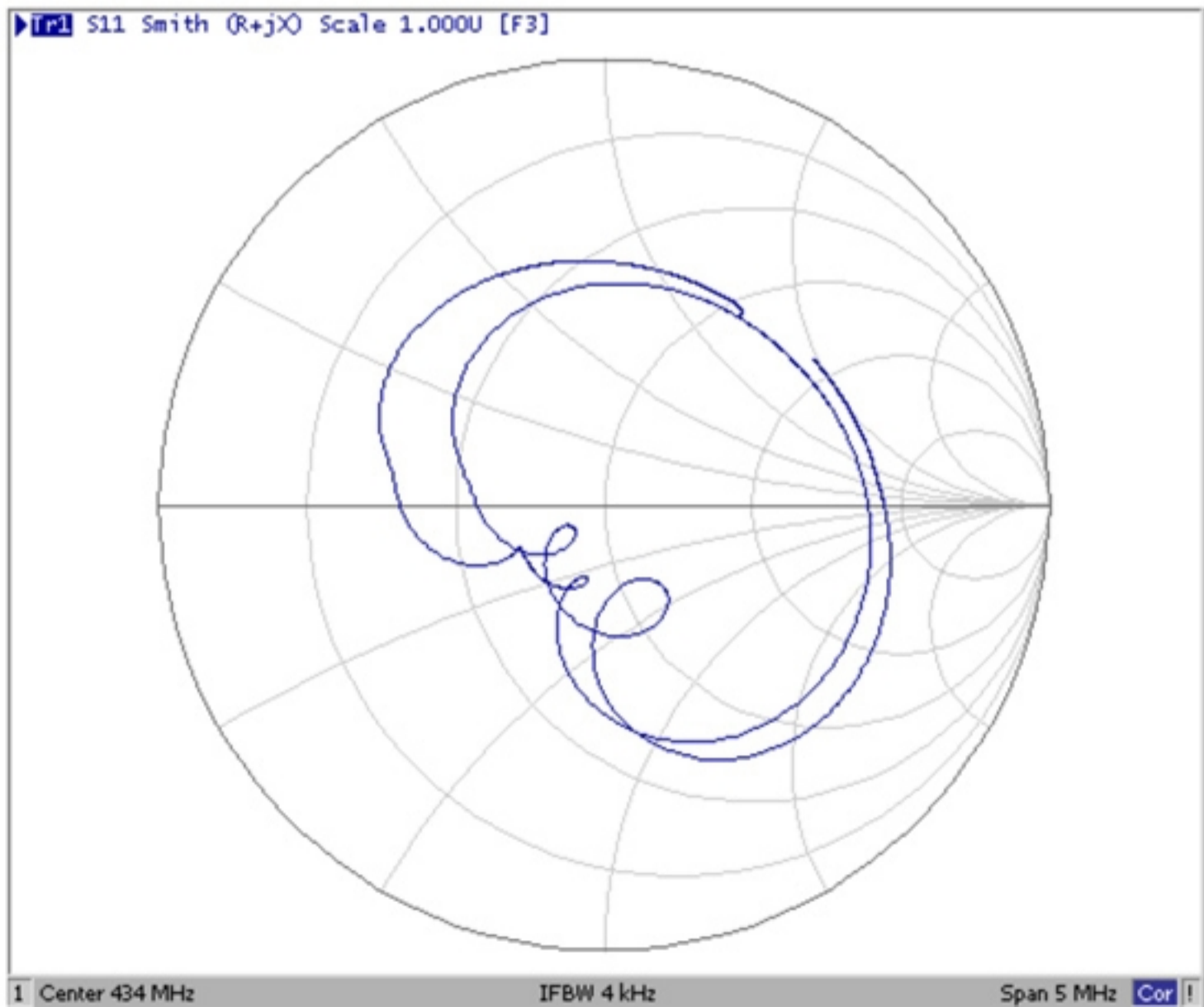
S21 : Span 20MHz



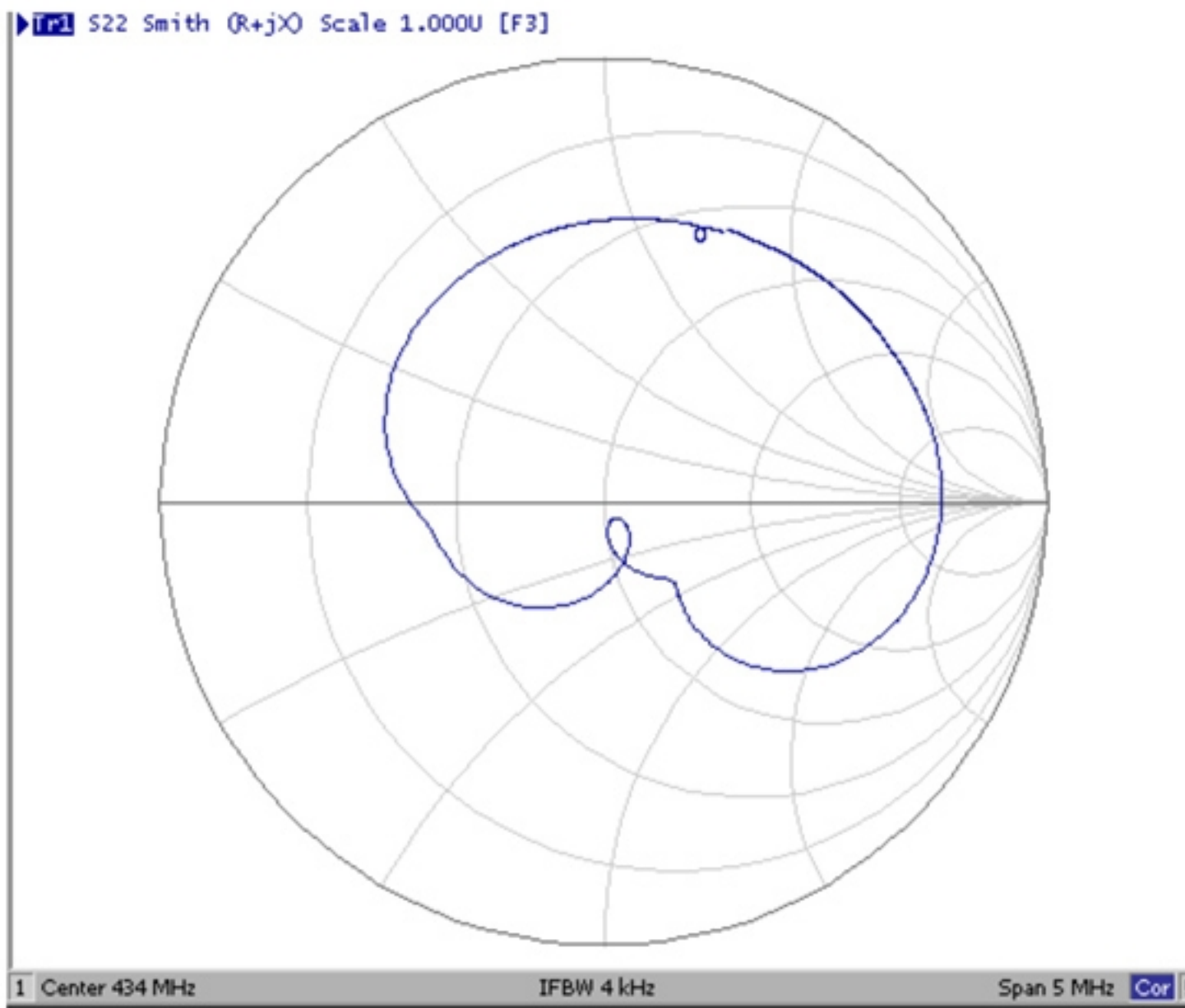
S21 : Span 5MHz



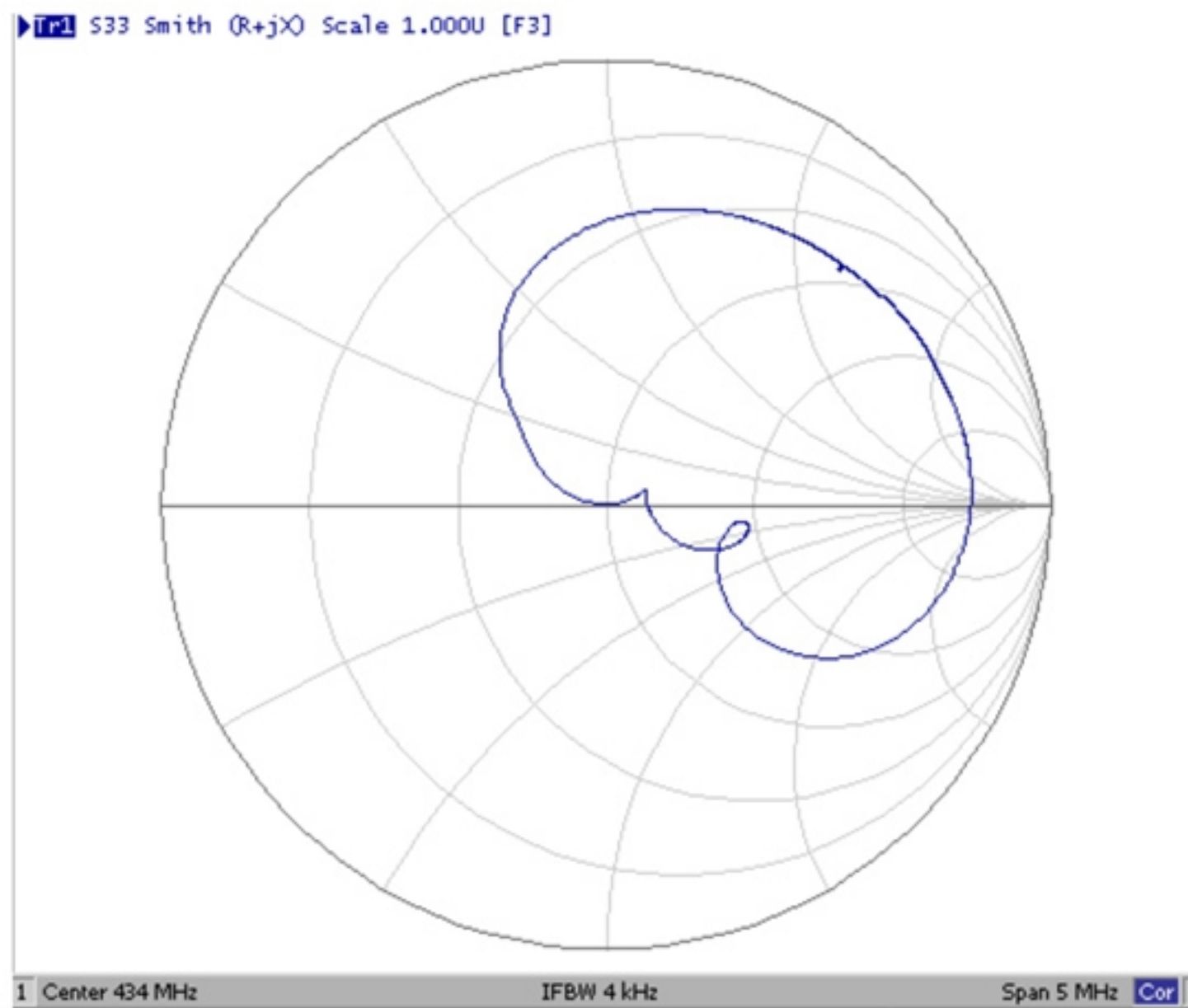
S11(I/P)



S22(O/P_2)

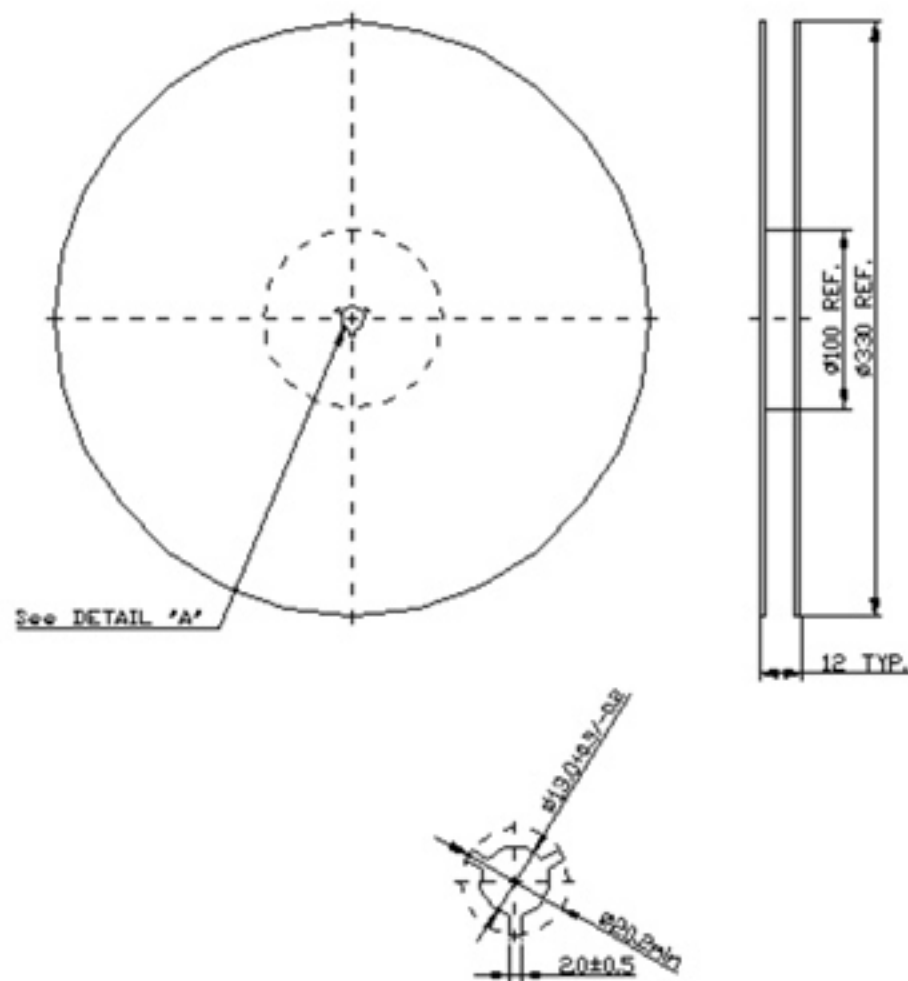


S33(O/P_1)

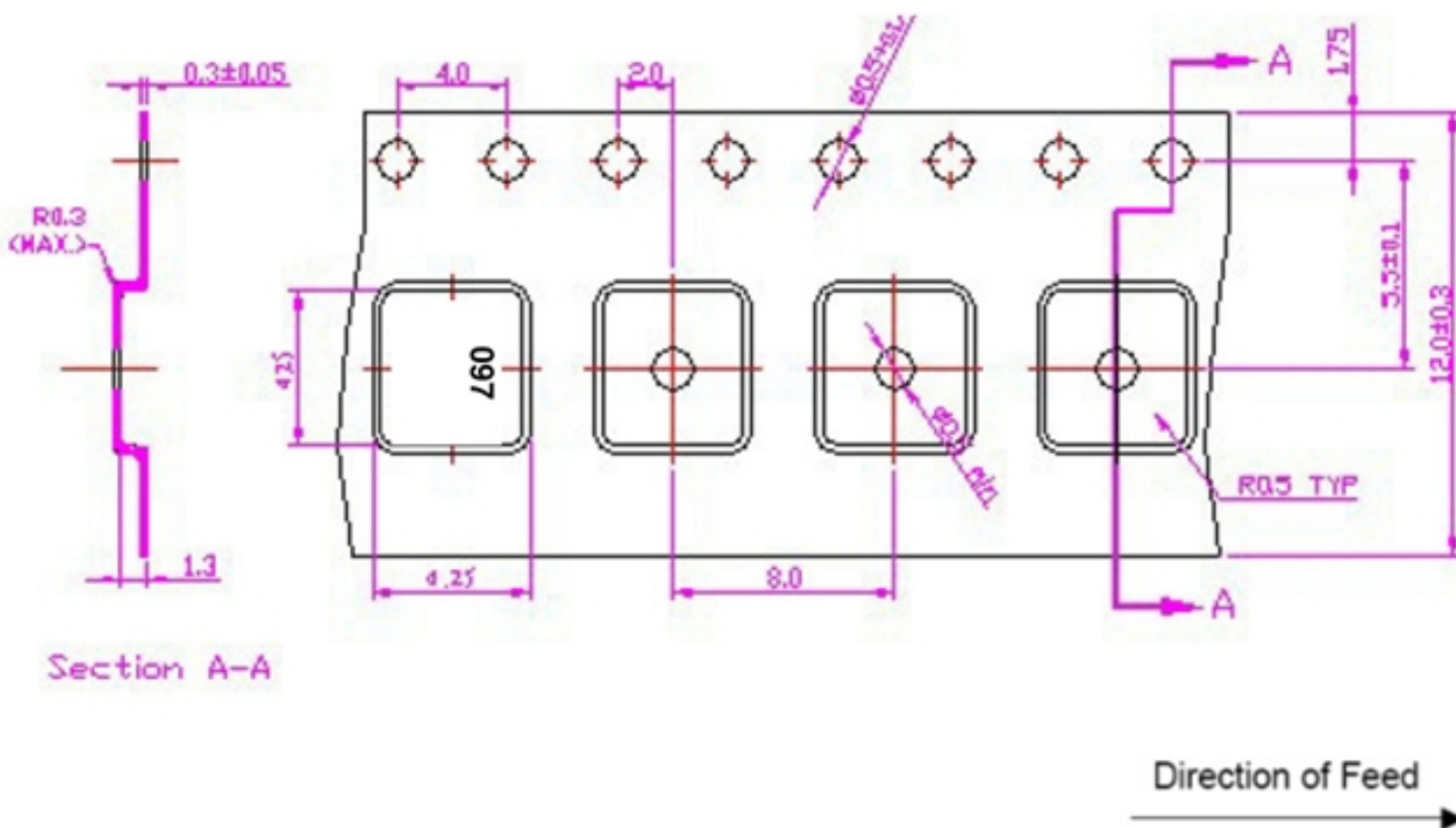


G. PACKING:

1. REEL DIMENSION



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 245~260°C peak (min. 10sec).
4. Time : 2 times.

