TAI-SAW TECHNOLOGY CO., LTD.
No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
Taoyuan, 324, Taiwan, R.O.C.
TEL: 886-3-4690038 FAX: 886-3-4697532
E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

Product Specifications Approval Sheet

Product Description: SAW Filter 1900MHz SMD 3.0 x 3.0 mm

TST Part No.: TA1093A

Customer Part No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by: Jun-Mao Chang

Approved by: Andrew Lee

Date: 9. 7. 2009

1. Customer signed back is required before TST can proceed with sample build and receive orders.
2. Orders received without customer signed back will be regarded as agreement on the specifications.
3. Any specifications changes must be approved upon by both parties and a new revision of specifications shall be released to reflect the changes.

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SAW Filter 1900MHz

MODEL NO.:TA1093A REV. NO.:1

A. MAXIMUM RATING:

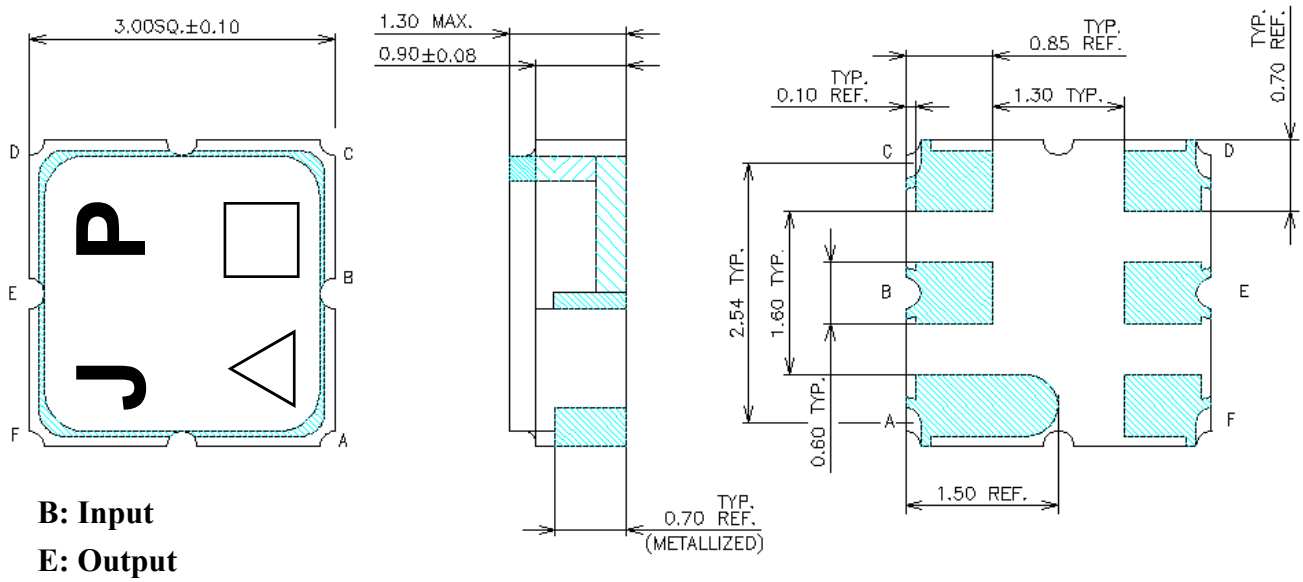
1. Input Power Level: 10 dBm
2. DC Voltage : 3V
3. Operating Temperature: -20°C to +70°C
4. Storage Temperature: -40°C to +85°C

RoHS Compliant
Lead free
Lead-free soldering

B. ELECTRICAL CHARACTERISTICS:

Item	Unit	Min	Typical	Max
Center Frequency **Fc**	MHz		**1900**	
Insertion Loss (1880~1920 MHz) **IL**	dB		**2.7**	**3.5**
Amplitude Ripple (1880~1920 MHz)	dB		**1.0**	**1.5**
Group Delay Ripple (1880~1920 MHz)	ns	--	**10**	**40**
Input VSWR (1880~1920 MHz)		--	**1.5**	**2.0**
Output VSWR (1880~1920 MHz)		--	**1.5**	**2.0**
Attenuation (Reference level from 0 dB)				
0.3 ~ 1000 MHz	dB	**30**	**35**	
1000 ~ 1700 MHz	dB	**30**	**35**	
1700 ~ 1830 MHz	dB	**32**	**38**	
1970 ~ 2400 MHz	dB	**38**	**45**	
2400 ~ 3000 MHz	dB	**30**	**40**	
3000 ~ 4000 MHz	dB	**25**	**34**	
Input / Output Impedance	Ω		**50**	

C.Outline Drawing:



B: Input

E: Output

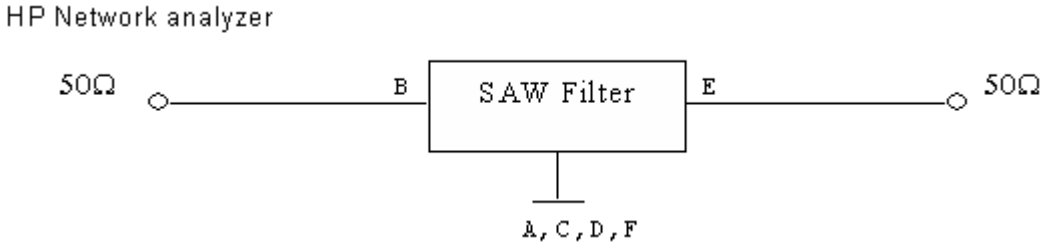
A,C,D,F: Ground

Dimension: mm

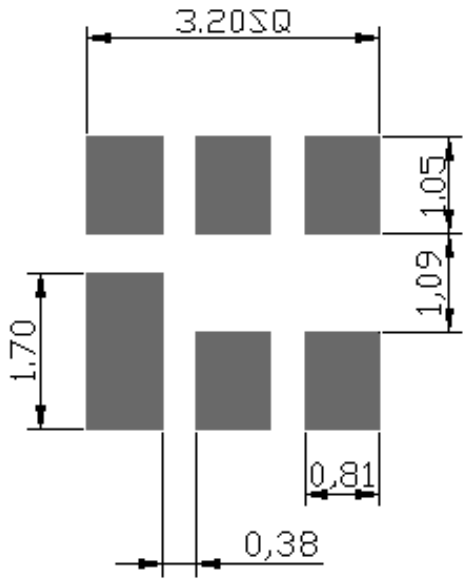
△**:** Year (年碼, 2009 年: 9)

□**:** Week (週碼, A~Z : week01~week26; a~z: week27~week52)

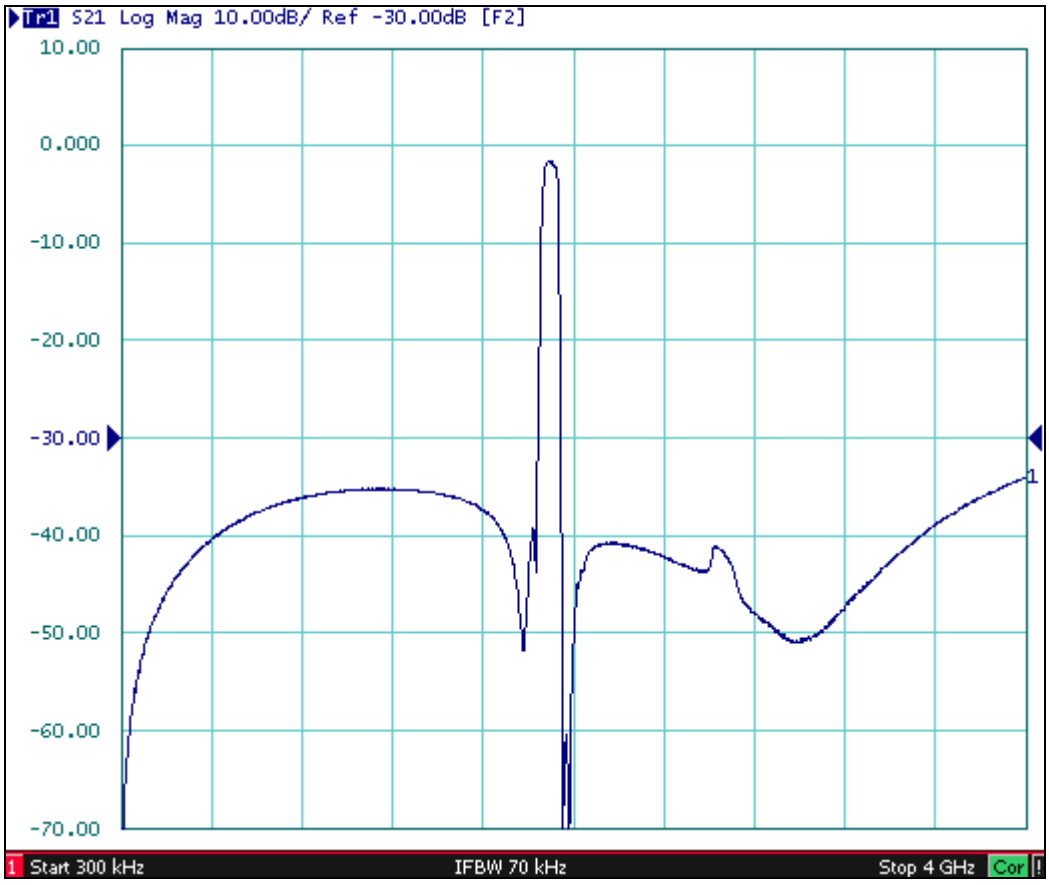
D. Measurement Circuit:

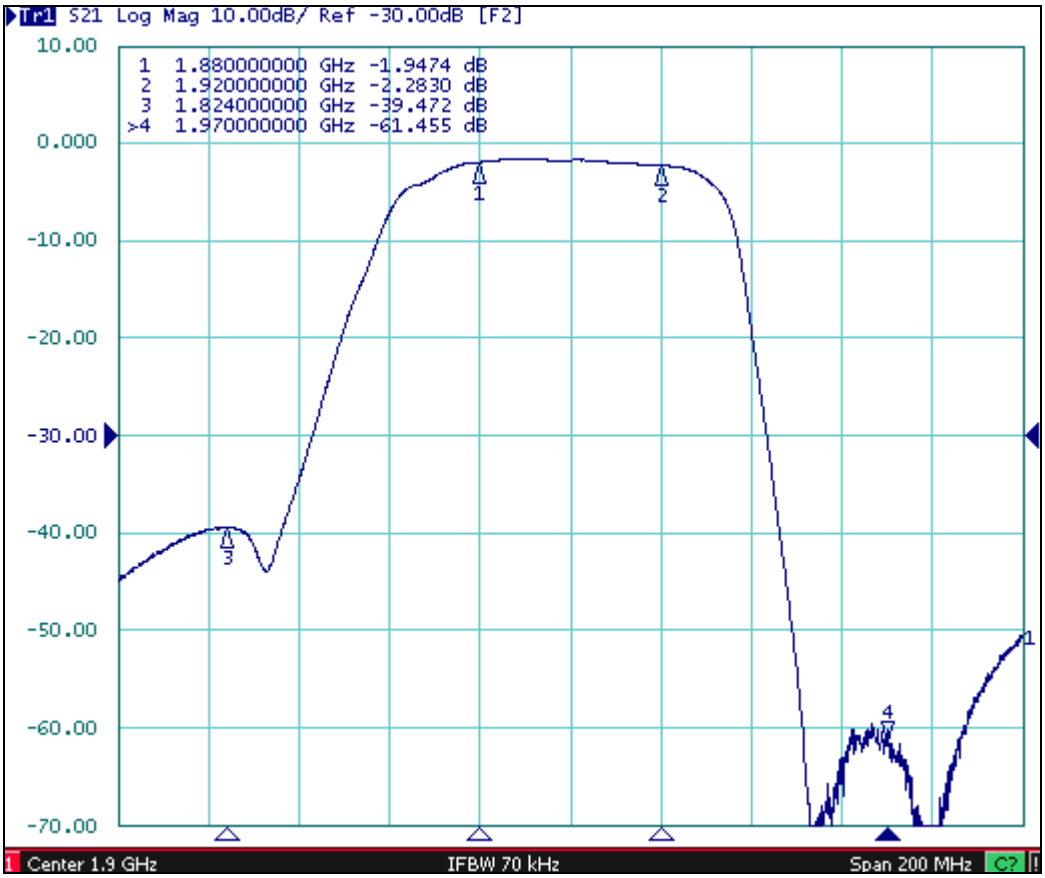


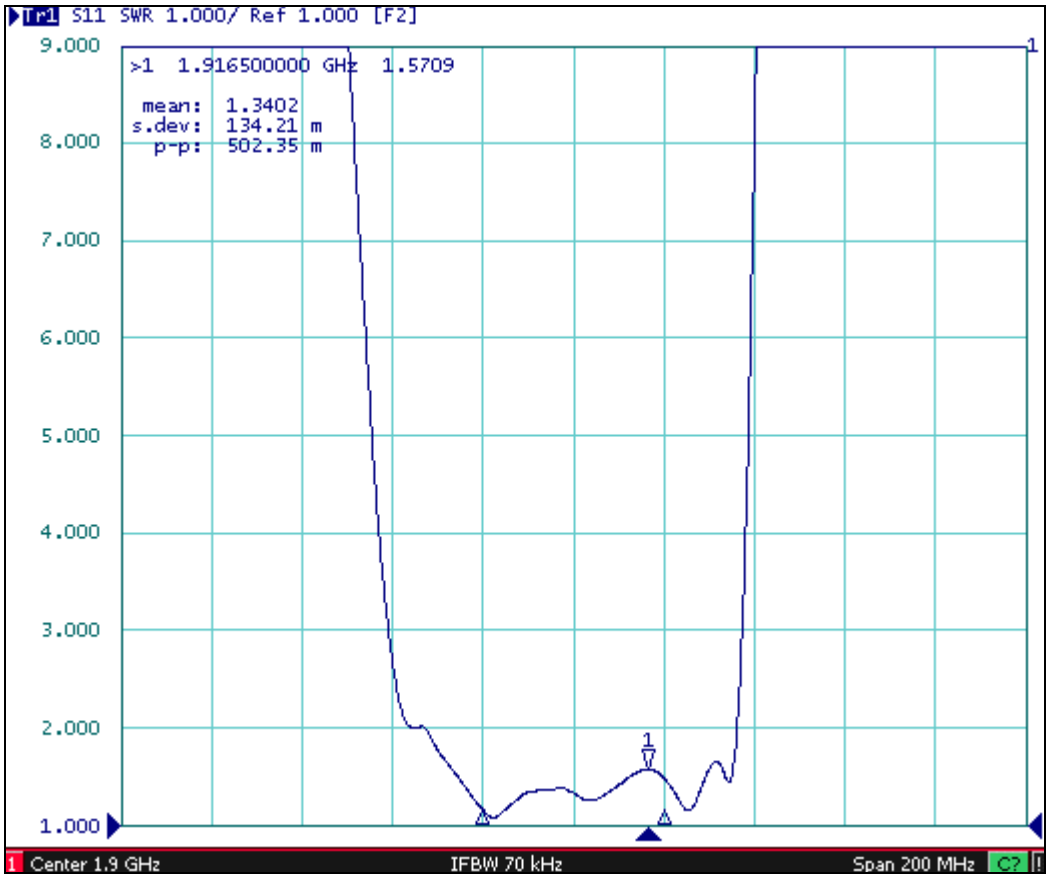
E. PCB Footprint:

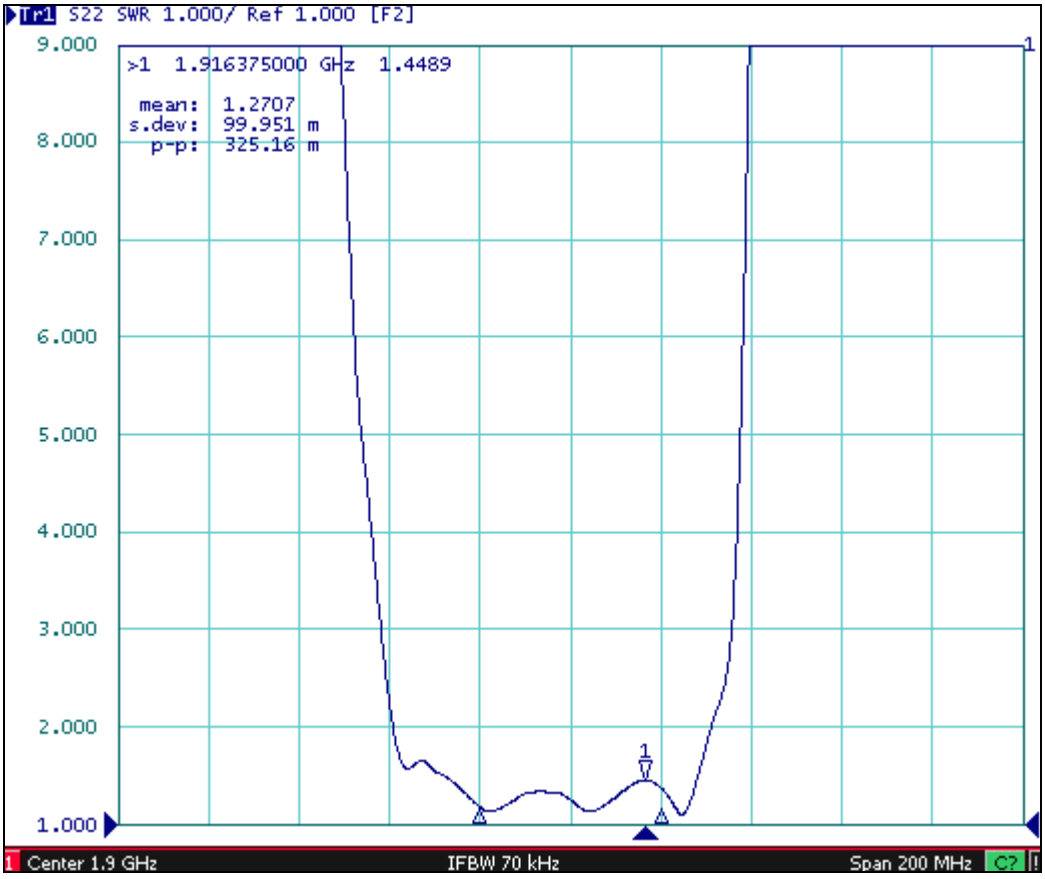


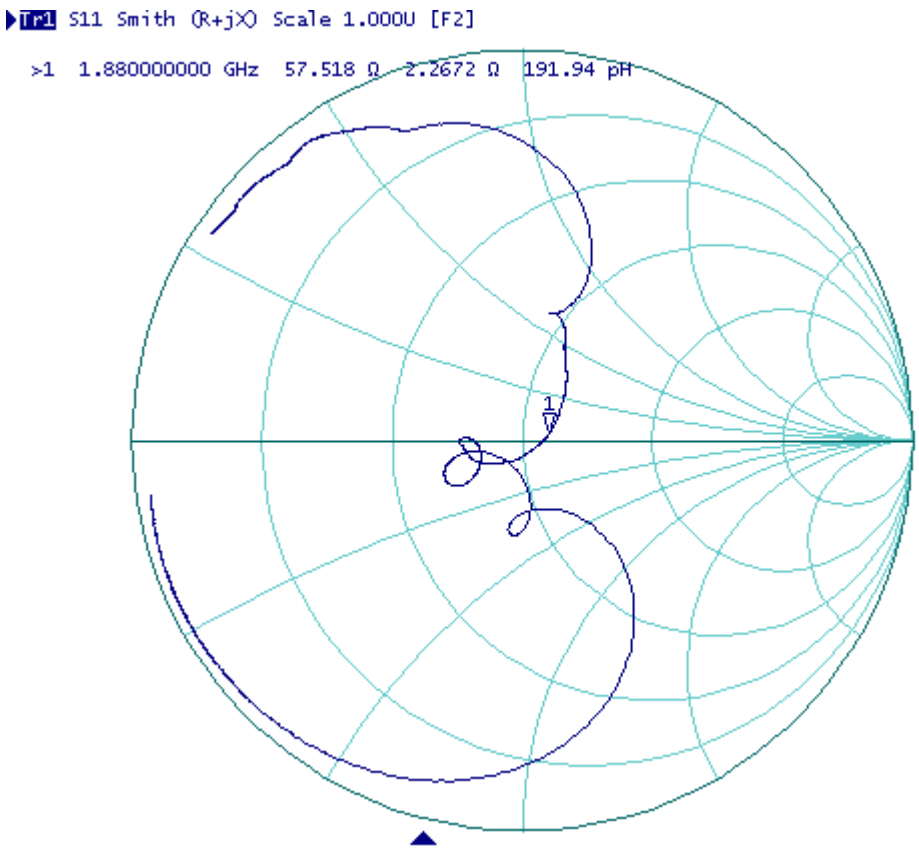
F. Frequency Characteristics : (Demo Board)

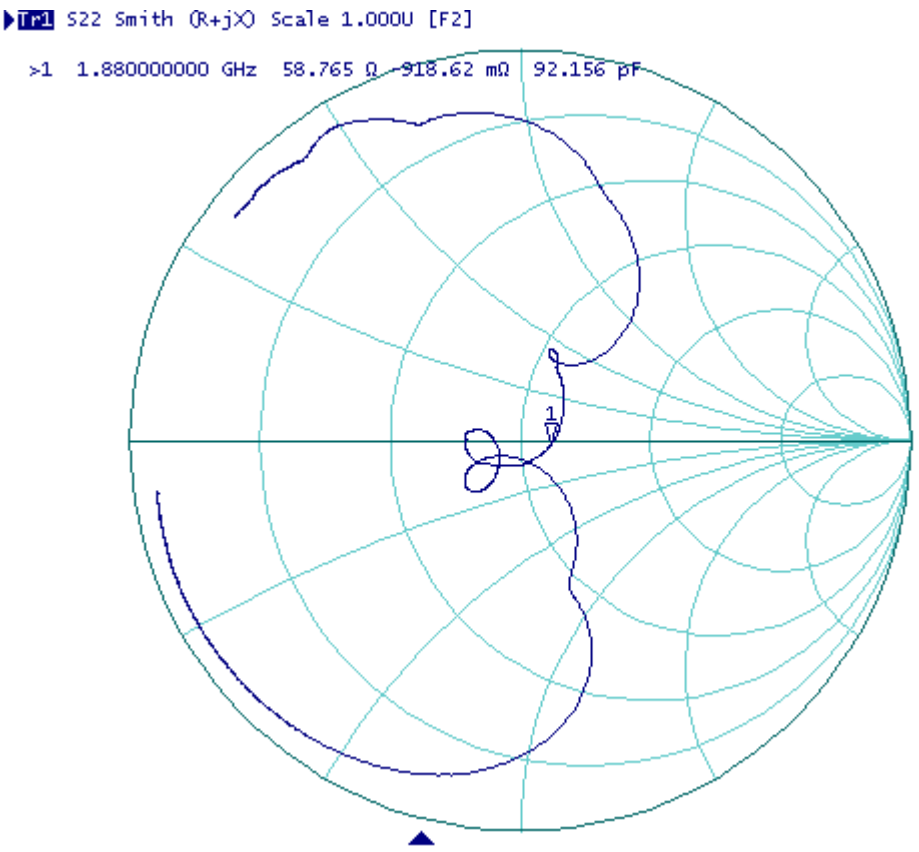


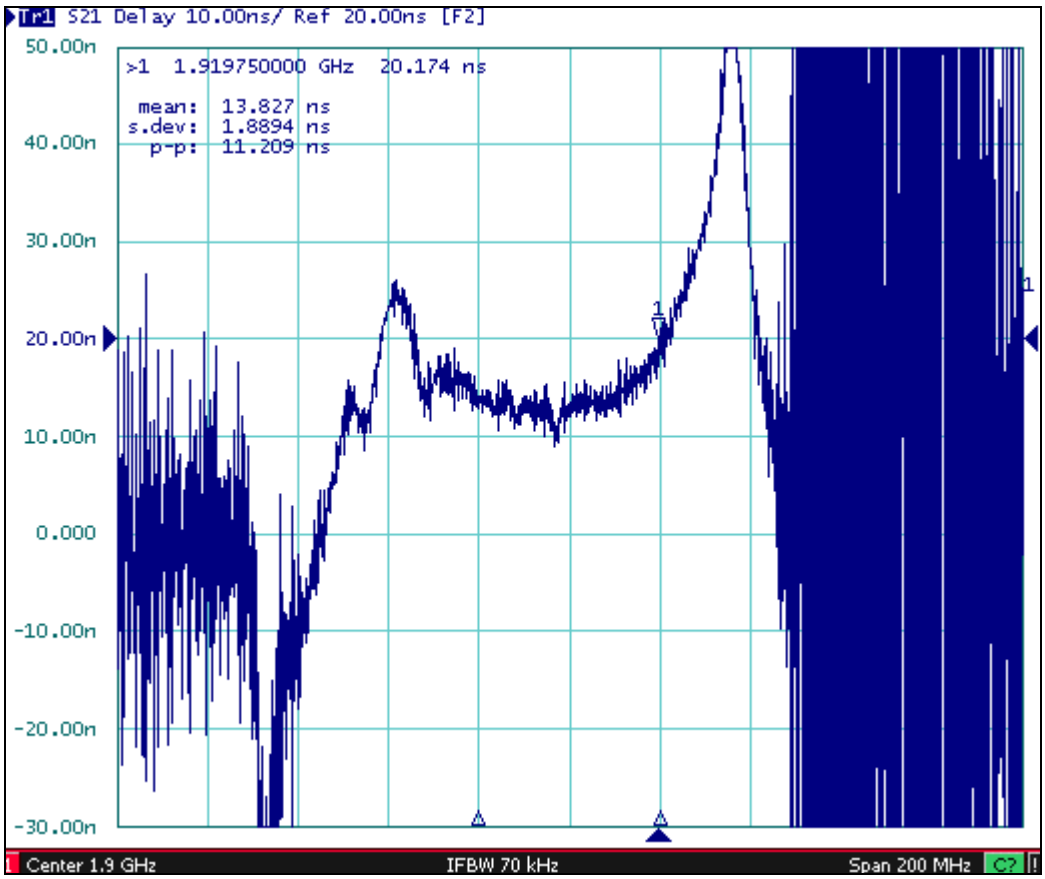



Tr1 S11 SWR 1.000/ Ref 1.000 [F2]
>1 1.916500000 GHz 1.5709
mean: 1.3402
s.dev: 134.21 m
p-p: 502.35 m
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
1
Center 1.9 GHz
IFBW 70 kHz
Span 200 MHz
C?


Tr1 S22 SWR 1.000/ Ref 1.000 [F2]
>1 1.916375000 GHz 1.4489
mean: 1.2707
s.dev: 99.951 m
p-p: 325.16 m
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
1
Center 1.9 GHz
IFBW 70 kHz
Span 200 MHz
C?

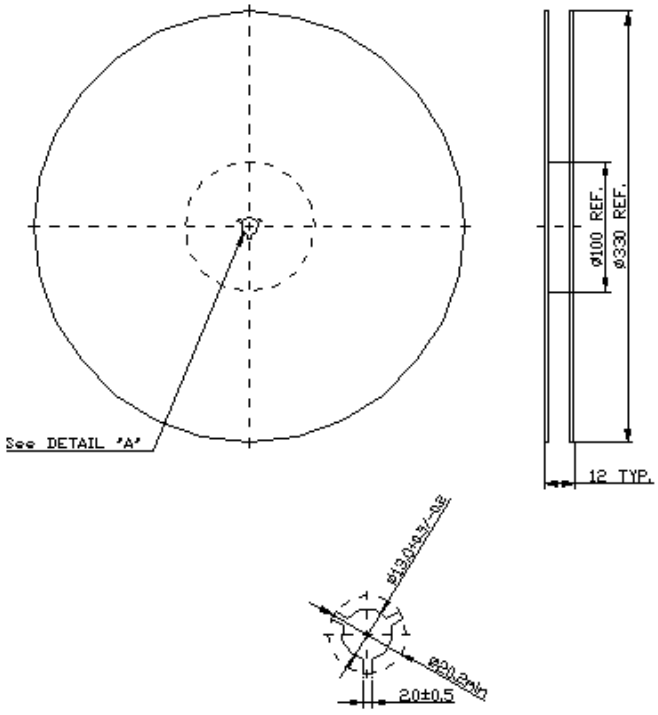

Tr1 S11 Smith (R+jX) Scale 1.000U [F2]
>1 1.880000000 GHz 57.518 Ω 2.2672 Ω 191.94 pH


Tr1 S22 Smith (R+jX) Scale 1.000U [F2]
>1 1.880000000 GHz 58.765 Ω 918.62 mΩ 92.156 pF



G. Packing:

1. REEL DIMENSION



2. TAPE DIMENSION