



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: ttsales@mail.taisaw.com Web: www.taisaw.com

Approval Sheet For Product Specification

Issued Date: March, 14, 2003

Product Name: Dual SAW Filter 942.5 and 1842.5 MHz 3.0X2.5 mm

TST Parts No.: TE0106A

Customer Parts No.: _____

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Bob Chau

Approval by: _____ Francis Chen

Date: _____ 3,14,2003



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Dual SAW Filter 942.5 and 1842.5 MHz

MODEL NO.: TE0106A

REV. NO.:1

A. MAXIMUM RATING:

1. Operating Temperature: -20°C ~ +75°C

2. Storage Temperature: -40°C ~ +85°C

RoHS Compliant
Lead free
Lead-free soldering

B. ELECTRICAL CHARACTERISTICS of EGSM Rx:

Terminating source impedance : $Z_s = 50 \Omega$

Terminating load impedance : $Z_L = 50 \Omega$

Item			Value			Note
			Min.	Typ.	Max.	
Center frequency	F_c	MHz	-	942.5	-	-
Insertion loss (925~960 MHz)	I.L.	(dB)	-	2.3	3.2	-
Ripple	(925~960 MHz)	(dB)	-	1.2	2.0	-
VSWR	(925~960 MHz)		-	1.8	2.5	-
Attenuation: (Reference level from 0 dB)						
DC ~ 905	MHz	(dB)	20	21.3	-	-
905 ~ 915	MHz	(dB)	6	20	-	-
980 ~ 2000	MHz	(dB)	20	22.5	-	-
2000 ~ 3000	MHz	(dB)	23	26	-	-
3000 ~ 4000	MHz	(dB)	20	32.5	-	-
4000 ~ 6000	MHz	(dB)	15	23.5	-	-

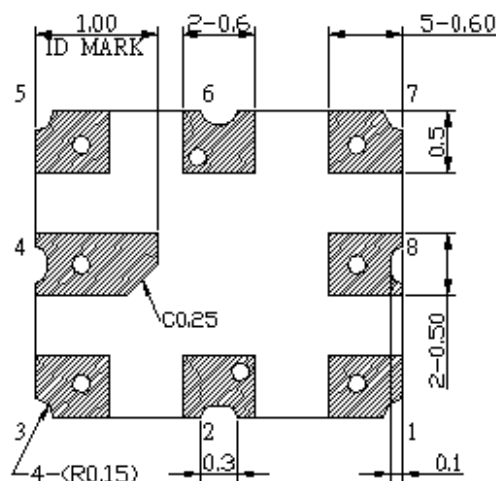
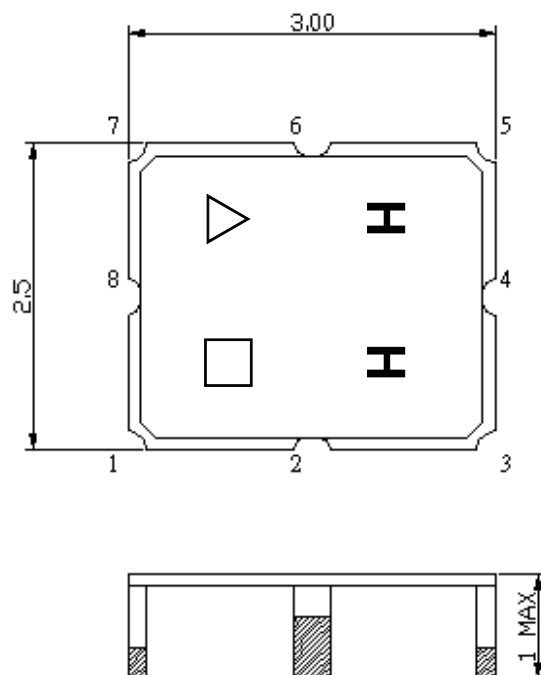
C. ELECTRICAL CHARACTERISTICS of PCS Rx:

Terminating source impedance : $Z_s = 50 \ \Omega$

Terminating load impedance : $Z_L = 50 \ \Omega$

Item			Value			Note
			Min.	Typ.	Max.	
Center frequency	F_c	MHz	-	1842.5	-	-
Insertion loss (1805~1880 MHz)	I.L.	(dB)	-	2.8	4.0	-
Ripple	(1805~1880 MHz)	(dB)	-	1.5	2.7	-
VSWR	(1805~1880 MHz)		-	1.9	2.5	-
Attenuation: (Reference level from 0 dB)						
DC ~ 1705	MHz	(dB)	20	22.5	-	-
1705 ~ 1785	MHz	(dB)	7	20	-	-
1920 ~ 1980	MHz	(dB)	23	27	-	-
1980 ~ 3000	MHz	(dB)	20	22.6	-	-
3000 ~ 4500	MHz	(dB)	22	23.5	-	-
4500 ~ 6000	MHz	(dB)	18	25	-	-

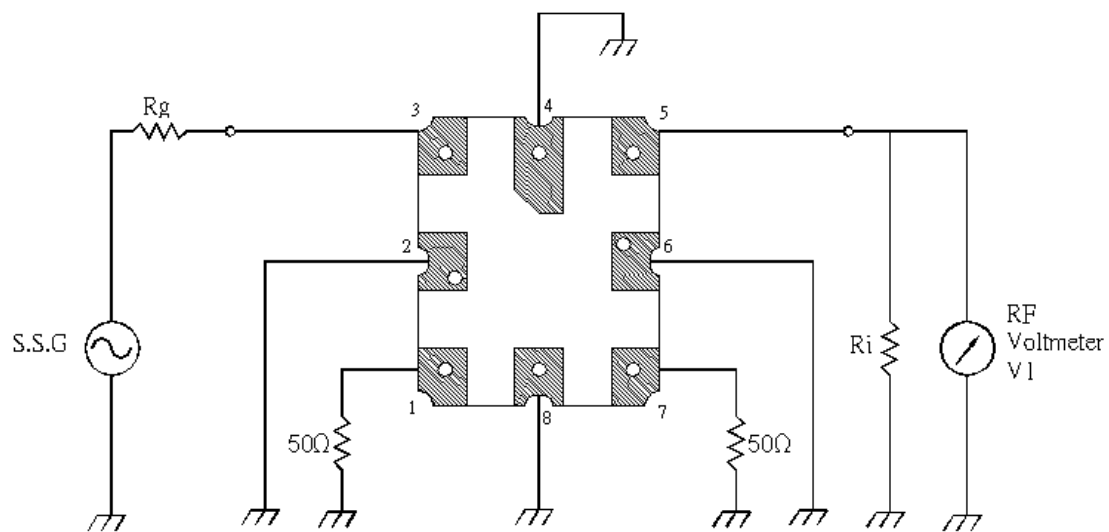
D. OUTLINE DRAWING:



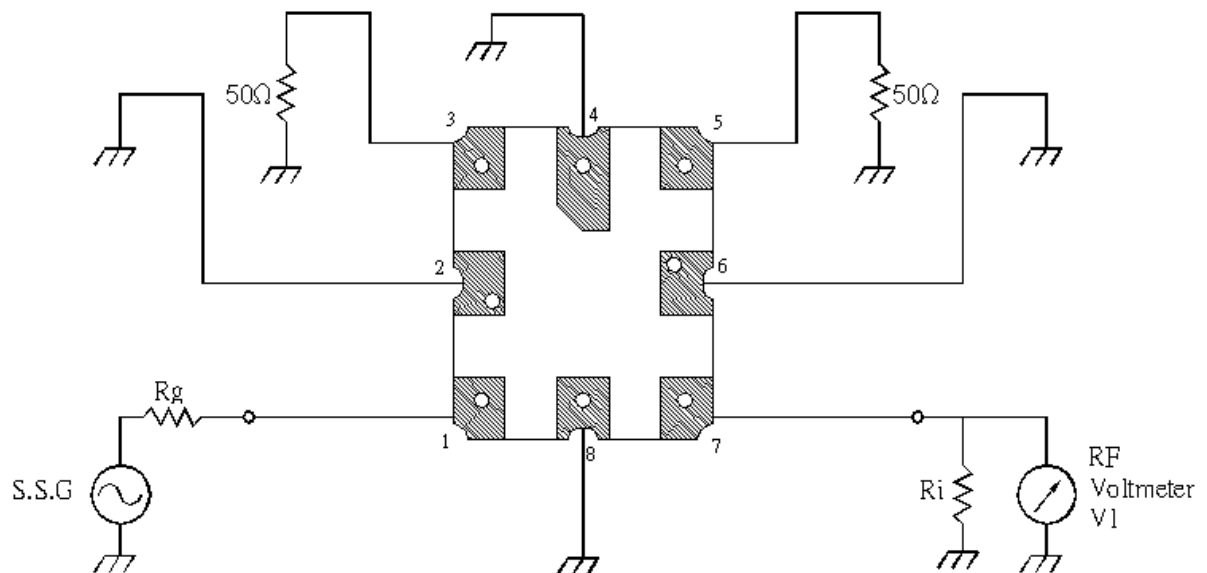
- (1) : DCS Output (1842.5)
- (3) : EGSM Output (942.5)
- (5) : EGSM Input (942.5)
- (7) : DCS Input (1842.5)
- △ : Year Code
- : Date Code
- Unit : mm

E. MEASUREMENT CIRCUIT:

(a) Measurement Circuit [for 942.5 MHz filter]



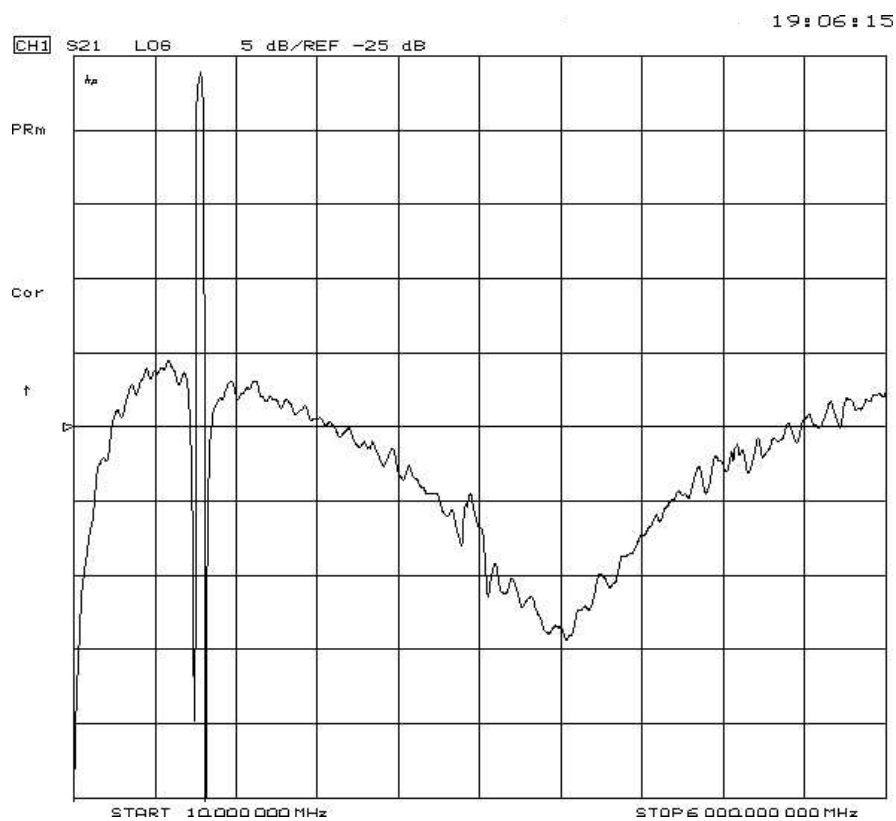
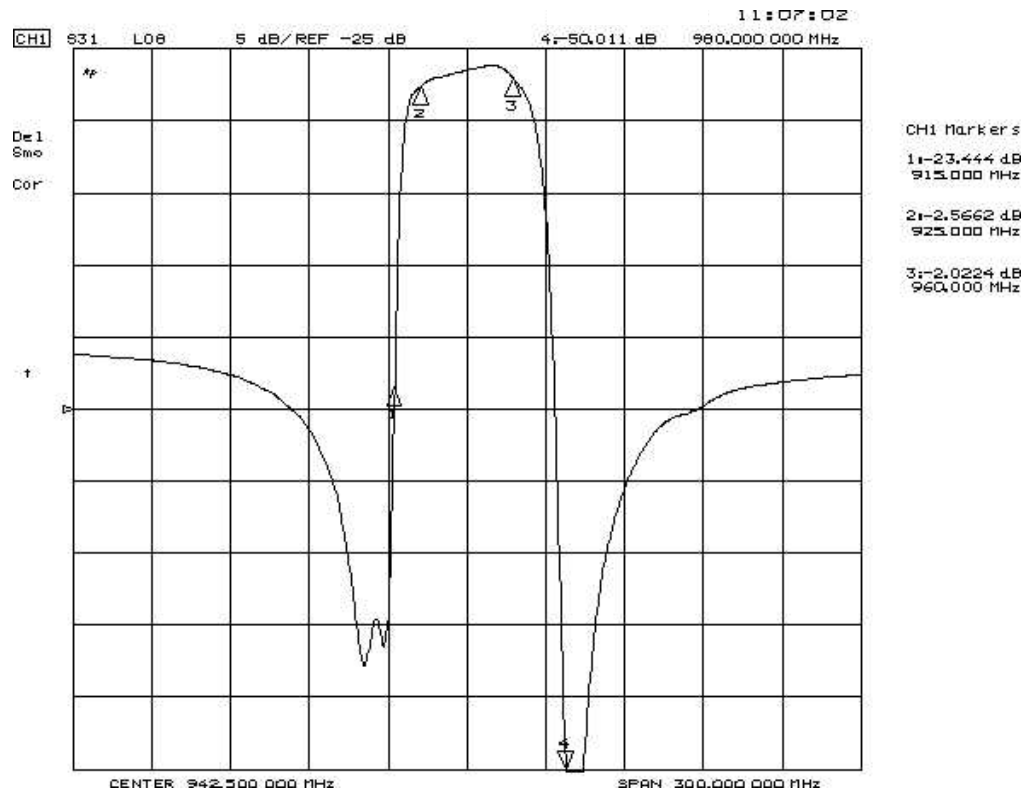
(b) Measurement Circuit [for 1842.5 MHz filter]



Ri : 50 Ω
Rg : 50 Ω

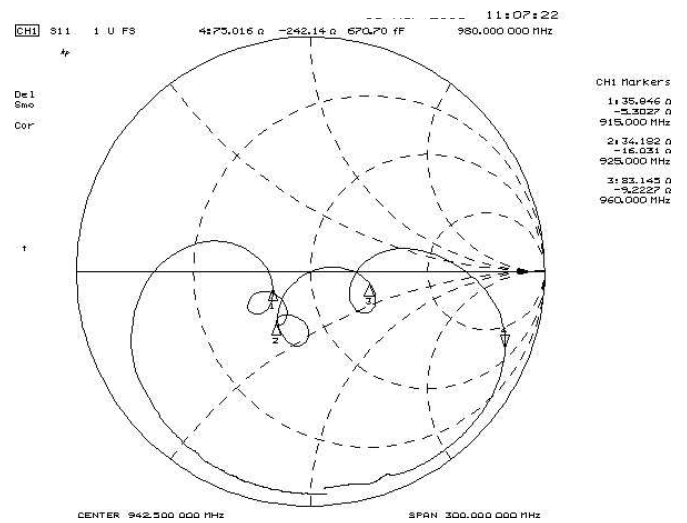
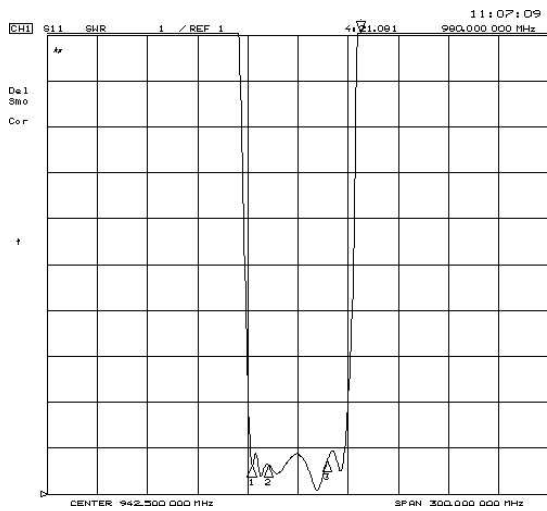
F. FREQUENCY CHARACTERISTICS:

1. Transfer function for EGSM Rx : (25 °C)

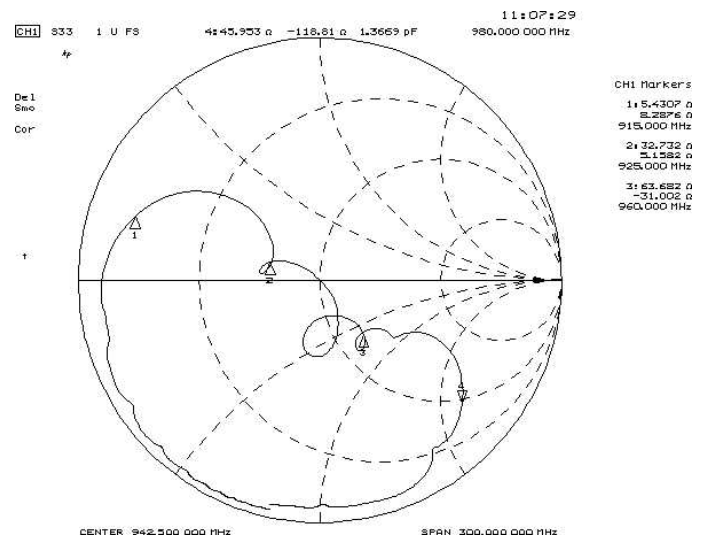
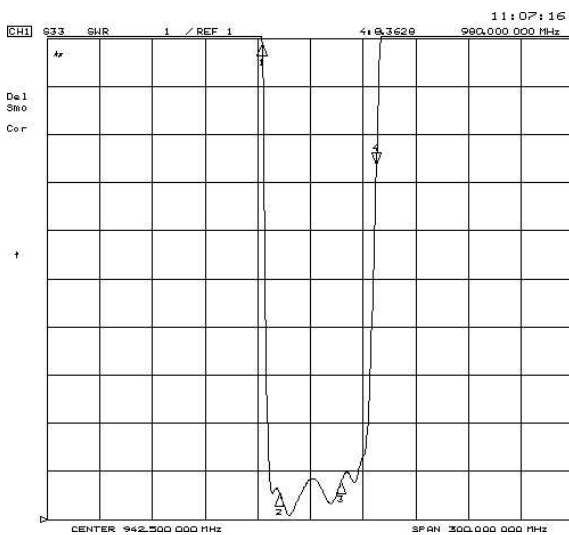


2. Reflection functions for EGSM Rx :

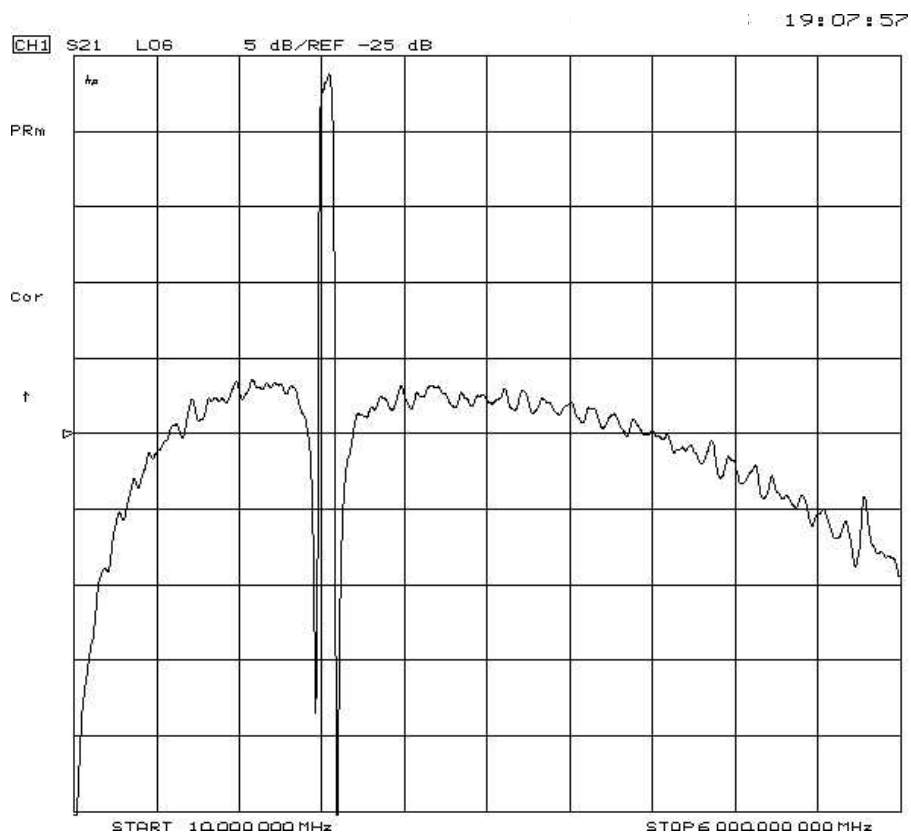
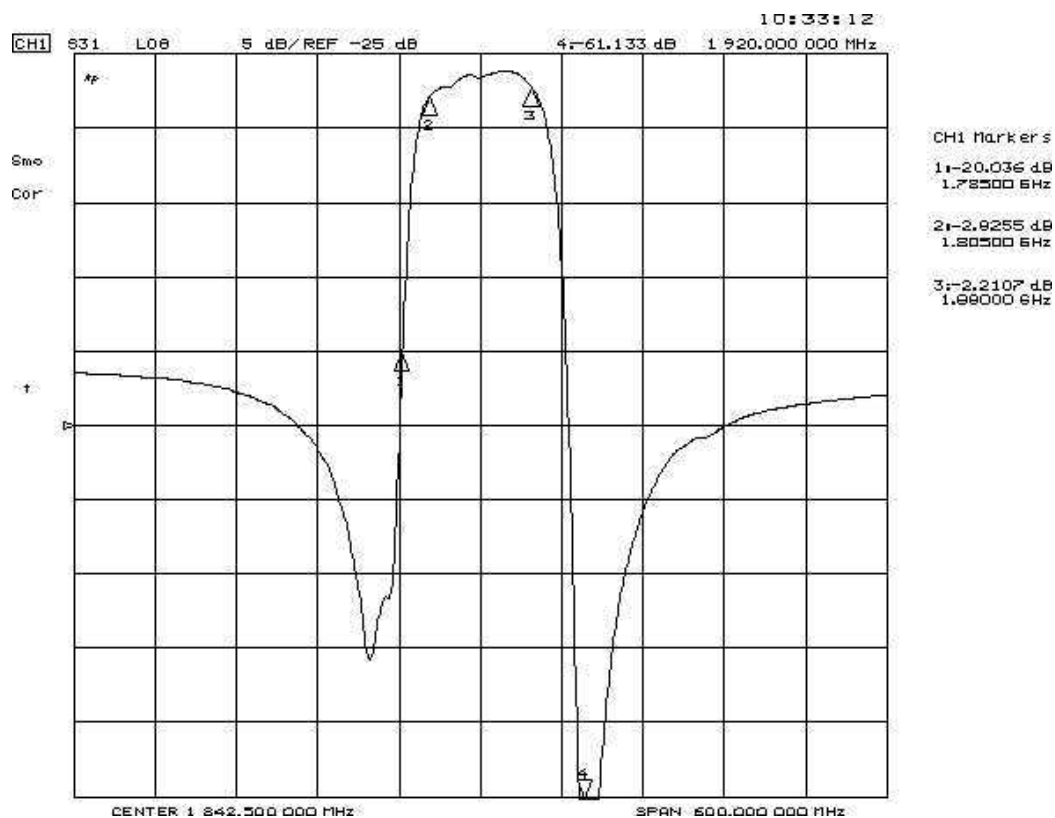
S11



S22

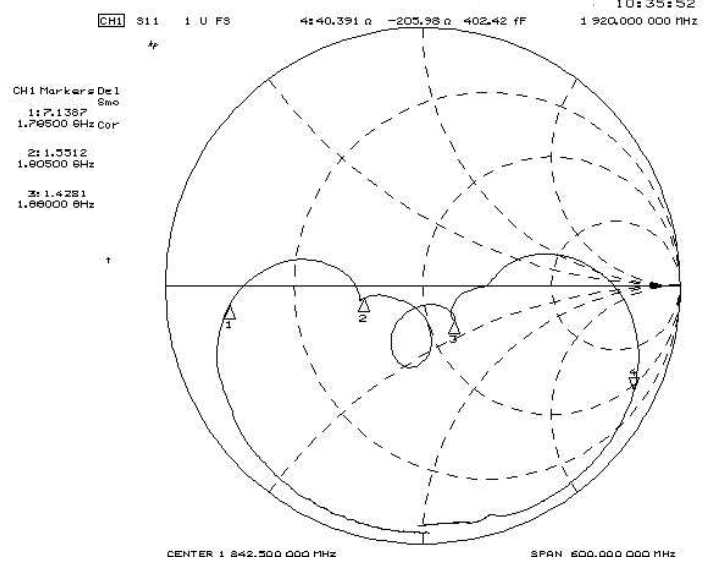
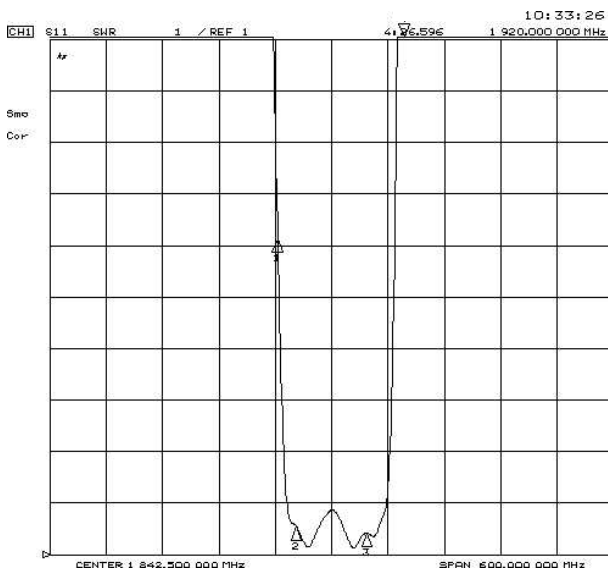


3. Transfer function for DCS Rx : (25 °C)



4. Reflection functions for DCS Rx :

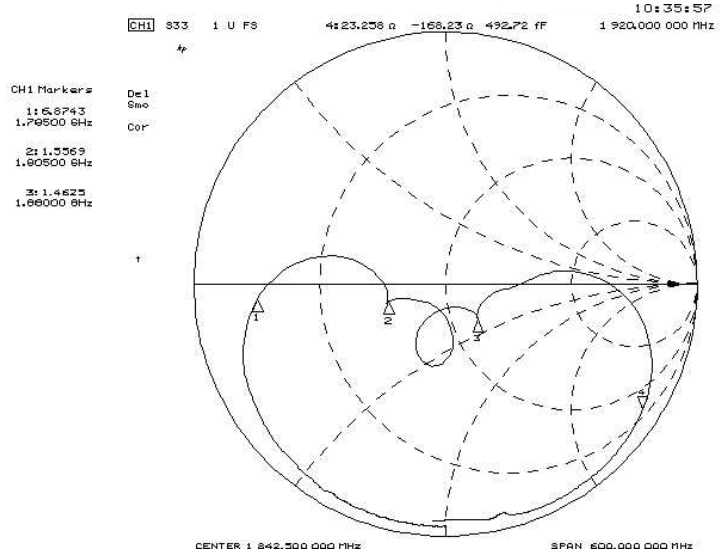
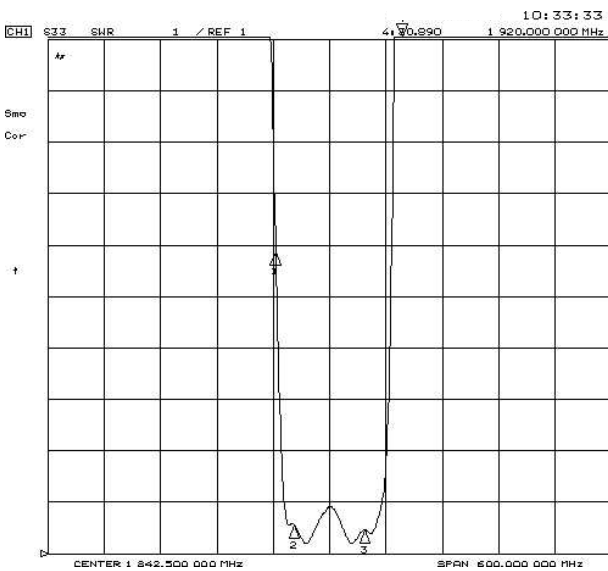
S11



CHI Markers

Marker	Frequency (GHz)	SWR
1	1.70652	-2.4509
2	1.78500	1.78500
3	1.80500	1.80500
4	1.86000	1.86000

S22



CHI Markers

Marker	Frequency (GHz)	SWR
1	1.72212	-1.8429
2	1.78500	1.78500
3	1.80500	1.80500
4	1.86000	1.86000

