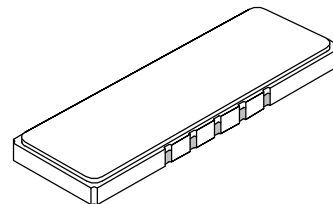


SF1062A 211 MHz SAW Filter



- Designed for GSM PCS Receiver IF Applications
- Simple External Impedance Matching
- Hermetic SMP-87 Surface-Mount Case
- Unbalanced Input and Output



Characteristic	Sym	Min	Typ	Max	Units	Notes
Nominal Center Frequency	fc	211.000			MHz	1
Passband	Insertion Loss at fc	IL	6	9.0	dB	1, 2
	1.5 dB Passband	BW _{1.5}	±50		kHz	
	2 dB Passband	BW ₂	±80			
	3 dB Passband	BW ₃	±100	±135		
	Amplitude Ripple over fc ±50 kHz			1.5	dB _{P-P}	
	Group Delay Variation over fc ±50 kHz	GDV	200	500	ns _{P-P}	
Rejection	Absolute Group Delay	GD	2.6		μs	1, 2, 3
	fc-400 to fc-200 and fc+200 to fc+400 kHz		5		dB	
	fc-600 to fc-400 and fc+400 to fc+600 kHz		25			
	fc-800 to fc-600 and fc+600 to fc+800 kHz		30	35		
	191 MHz to fc -800 kHz and fc +800 kHz to 231 MHz		35	45		
Operating Temperature Range	T _A	-40		+85	°C	1

Impedance Matching to 50 Ω unbalanced	External L-C
Case Style	SMP-87 22.1 x 8 mm Nominal Footprint
Lid Symbolization (YY = year, WW = week)	RFM SF1062A YYWW

Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+10	dBm
Max. DC voltage between any 2 terminals	30	VDC
Storage Temperature Range	-40 to +85	°C
Max Soldering Profile	265°C for 10 s	

Electrical Connections (See note 3)

Connection	Terminals
Port 1 Hot	1
Port 1 Gnd Return	10
Port 2 Hot	6
Port 2 Gnd Return	5
Case Ground	All others

Notes:

1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network analyzer.
2. Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, fc.
3. Rejection is measured as attenuation below the minimum IL point in the passband. Rejection in final user application is dependent on PCB layout and external impedance matching design. See Application Note No. 42 for details. All "NC" or "no connection" terminals should be grounded.
4. "LRIP" or "L" after the part number indicates "low rate initial production" and "ENG" or "E" indicates "engineering prototypes."
5. The design, manufacturing process, and specifications of this filter are subject to change.
6. Either Port 1 or Port 2 may be used for either input or output in the design. However, impedances and impedance matching may vary between Port 1 and Port 2, so that the filter must always be installed in one direction per the circuit design.
7. US and international patents may apply.
8. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.
9. ©Copyright 1999, RF Monolithics Inc.
10. Electrostatic Sensitive Device. Observe precautions for handling.

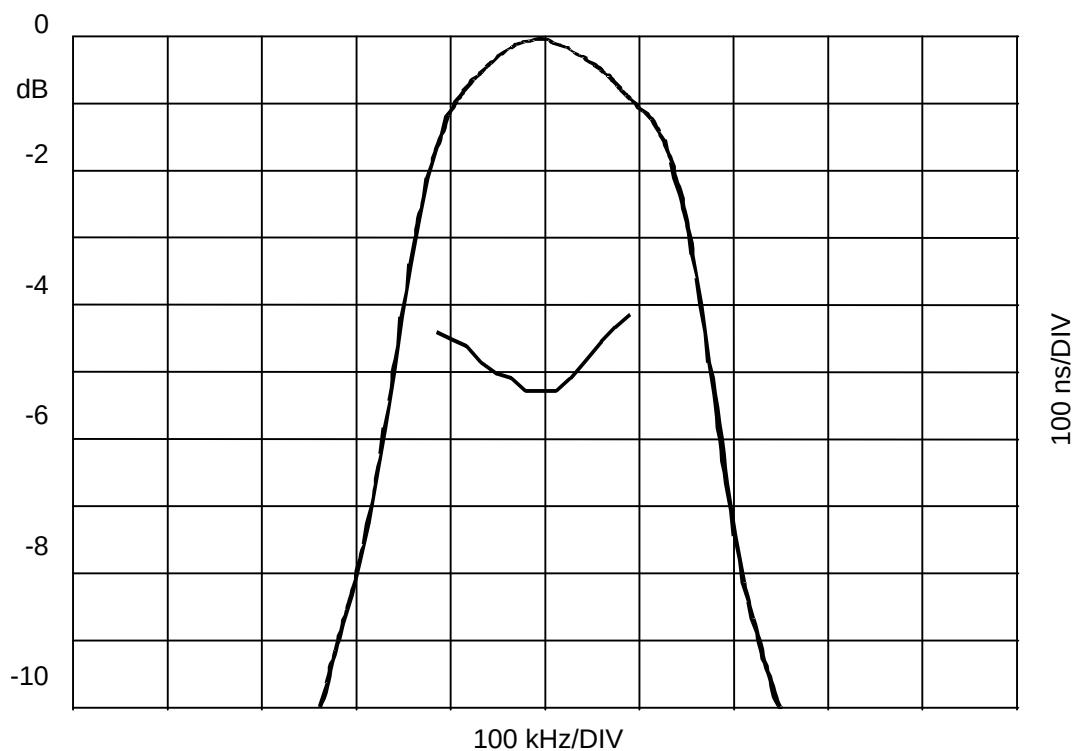
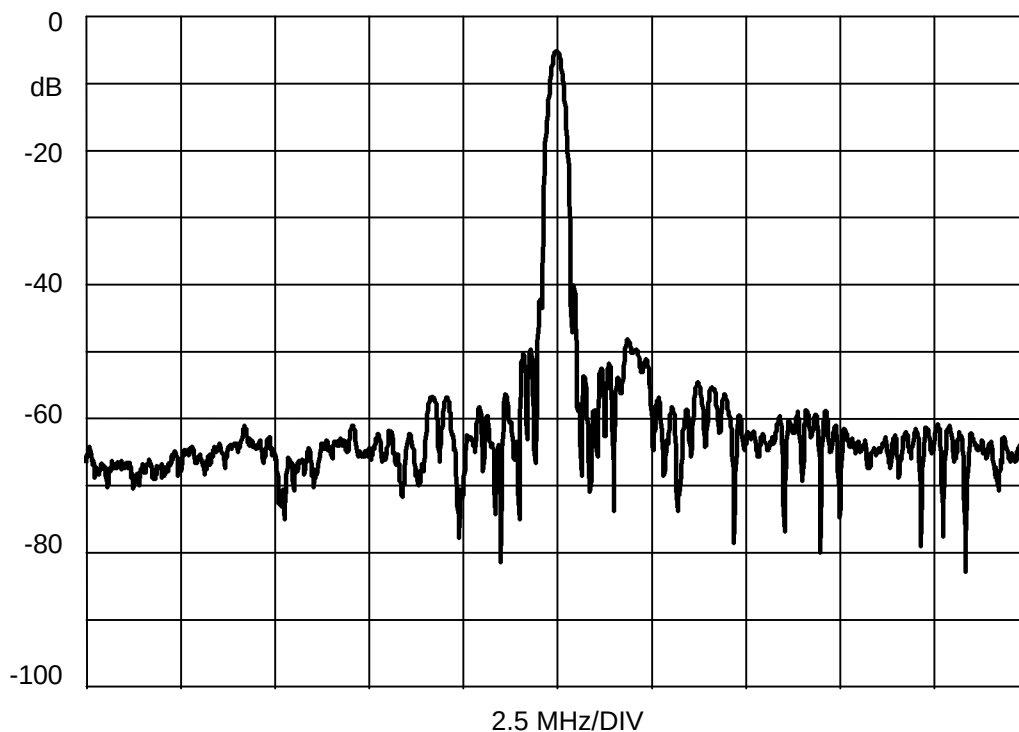


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Fax: +1(972)387-8148
e-mail: info@rfm.com
Home page: www.rfm.com

European Sales Office
44 1963 251383
44 1963 251510

SF1062A 211 MHz SAW Filter

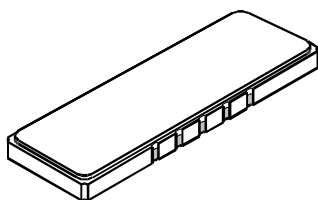


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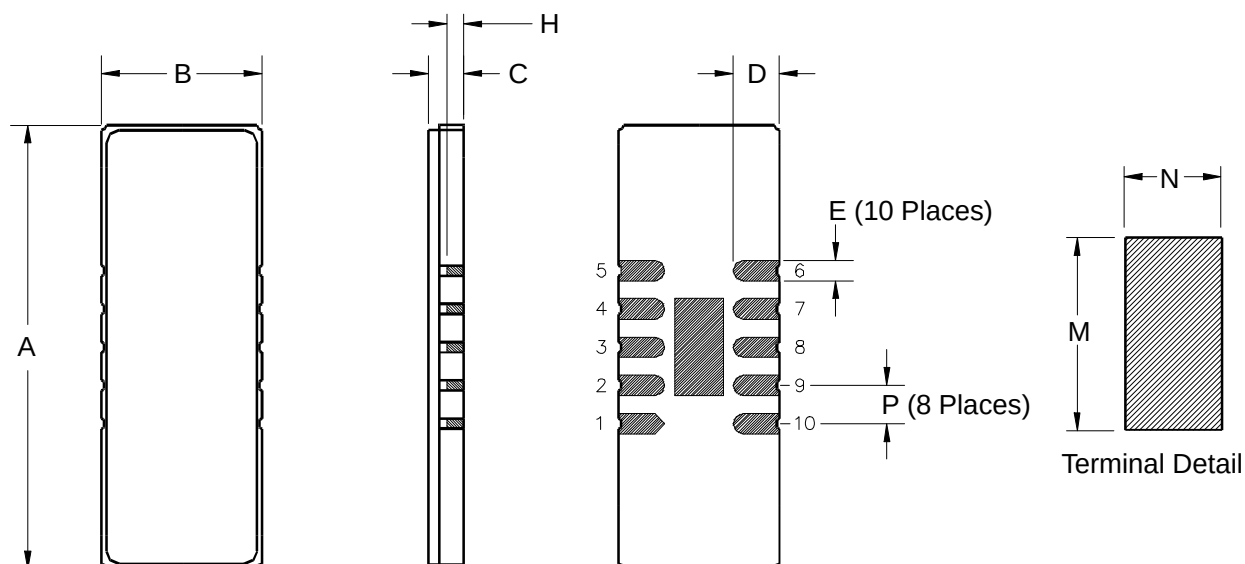
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European Sales Office
44 1963 251383
44 1963 251510

10-Terminal Ceramic Surface-Mount Case 22.1 x 8 mm Nominal Footprint



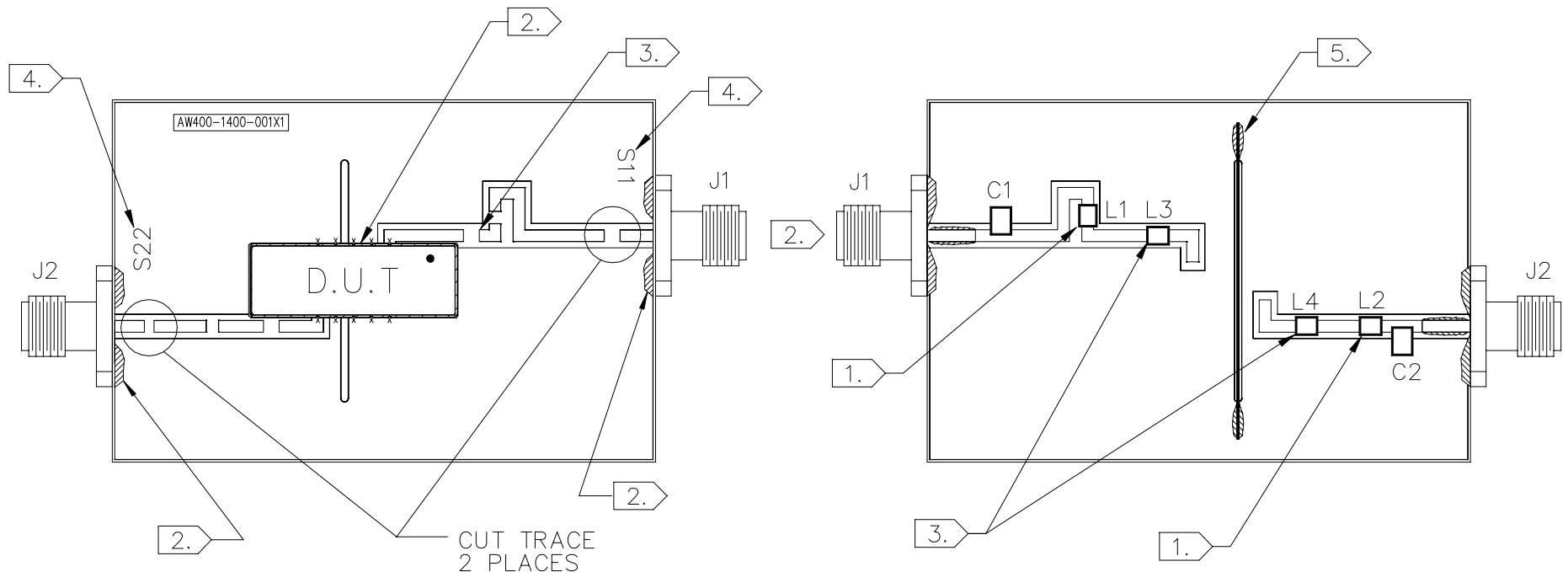
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	21.90	22.10	22.40	0.862	0.870	0.882
B	7.80	8.00	8.30	0.307	0.315	0.327
C		1.78	2.00		0.070	0.079
D		2.29			0.090	
E		1.02			0.040	
H		0.76			0.030	
M		4.83			0.190	
N		2.41			0.095	
P		1.905			0.075	



NOTES:

1. NOTE PROPER ORIENTATION OF INDUCTORS L1 & L4. THEY ARE TO BE POSITIONED 90° TO EACH OTHER.
2. SOLDER SURFACE MOUNT PACKAGE TO TEST SIDE OF PCB. SOLDER 10 PLACES AND CONNECTORS AS SHOWN.
3. CUT TRACES ON BOTH SIDES OF THE PCB BETWEEN THE SAME HOLES TO PROVIDE GAP FOR L3 & L4.
4. LABEL BOARD USING ELECTRONIC METHOD.
5. CUT SHIELD TAB SO THAT IT IS EVEN WITH TEST SIDE. SOLDER AS SHOWN.

REV	ECN NO.	DESCRIPTION	DATE
A	7387	INITIAL RELEASE	12jan99



DRAWN BY/DATE: L. ASHMORE 11 JAN 99

TITLE: ASSEMBLY DIAGRAM, SF1062A-DEMO

RF Monolithics, Inc.
DALLAS, TEXAS 75244

CHECKED/APPROVED

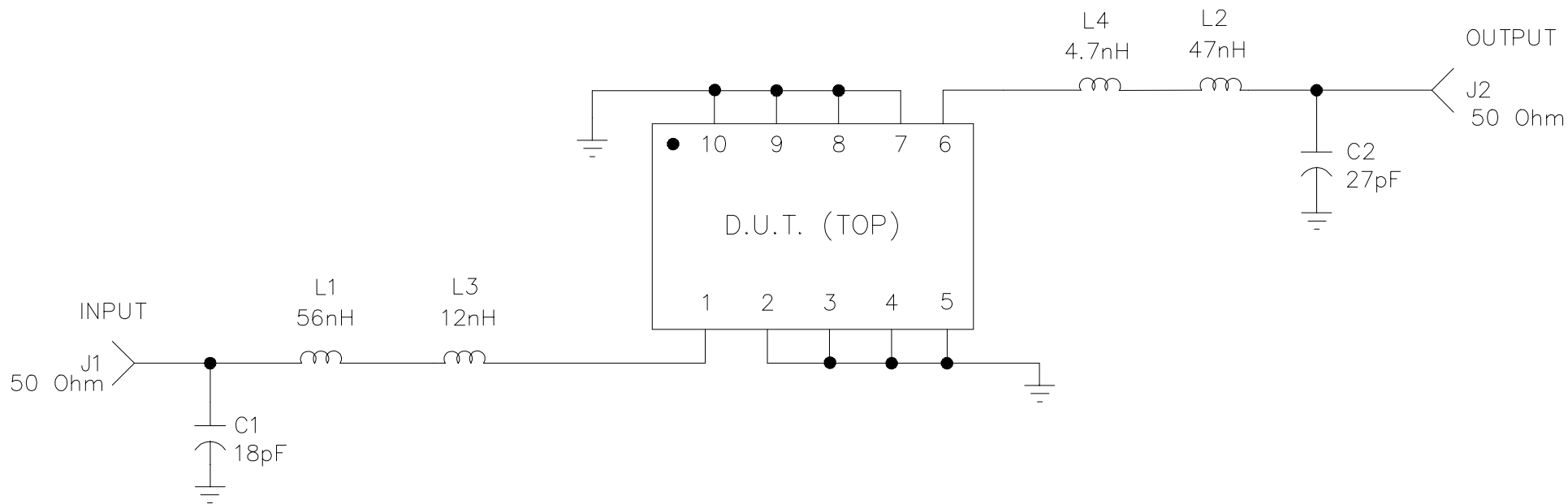
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2U874

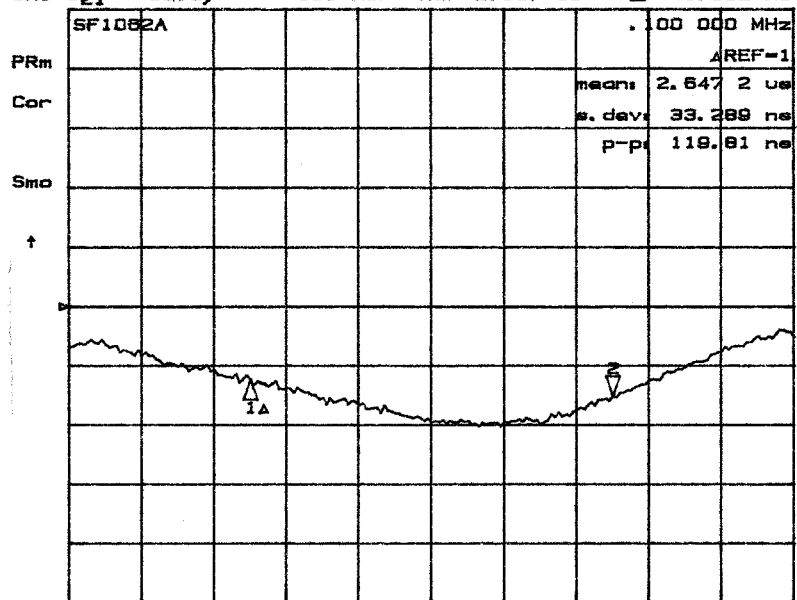
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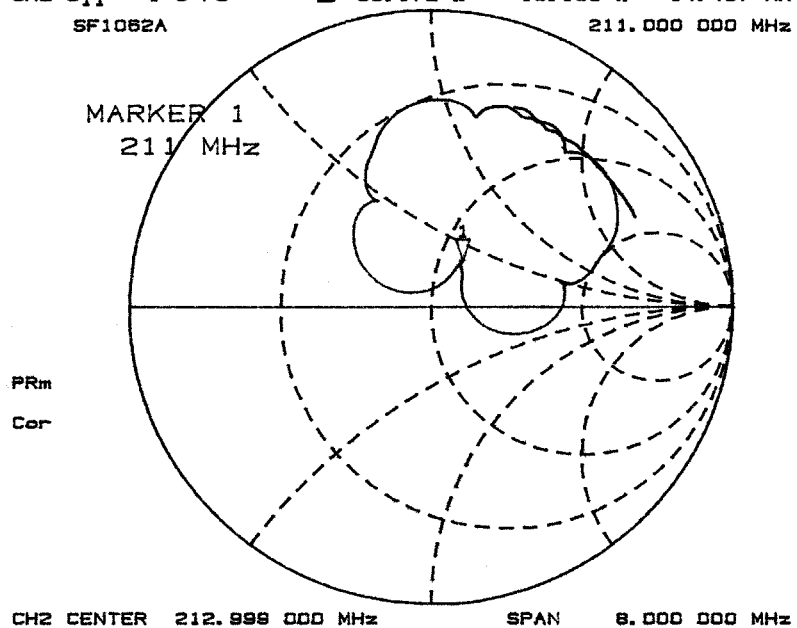
SHEET
1/3



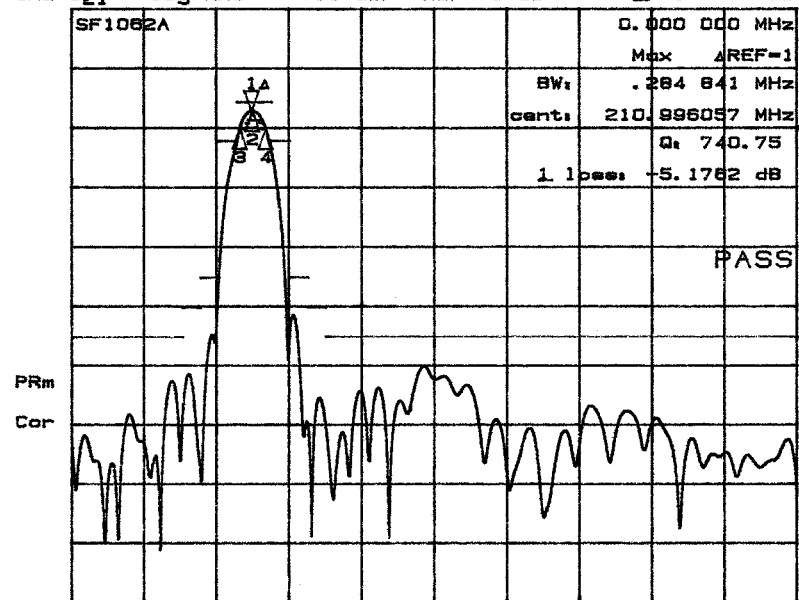
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CH1 S21 delay 150 ns/ REF 2.907 us 2 -41.962 ns



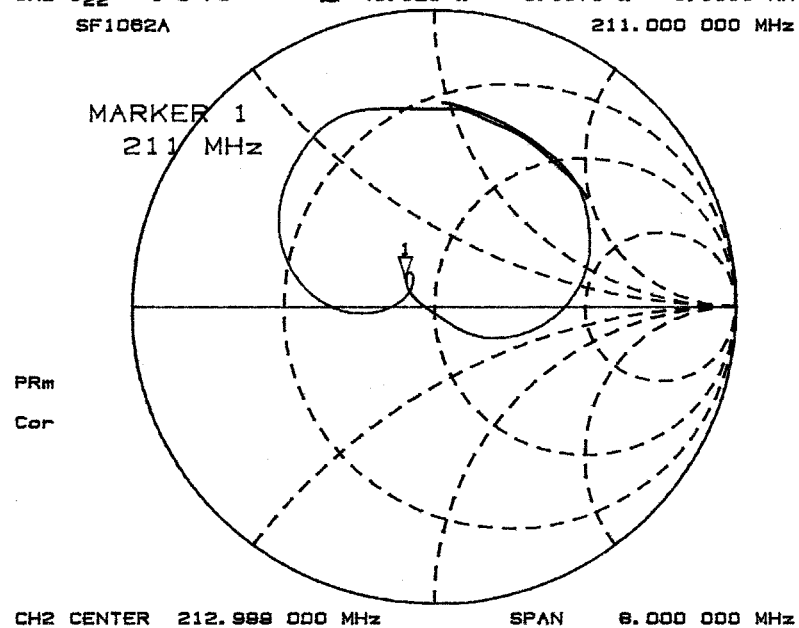
11 Nov 1998 14:37:27
CH2 S11 1 U FS 1 58.172 n 19.166 n 14.457 nH
SF1062A 211.000 000 MHz



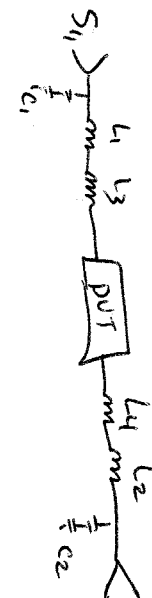
11 Nov 1998 14:35:14
CH2 S21 log MAG 10 dB/ REF -8 dB 1 0 dB



11 Nov 1998 14:39:41
CH2 S22 1 U FS 1 40.523 n 8.1973 n 6.1831 nH
SF1062A 211.000 000 MHz



SF1062
Demo #2
Epat-338468
11/11/98
LP



L1 - 56 nH
L2 - 47 nH
L3 - 12 nH
L4 - 4.7 nH
C1 - 18 pF
C2 - 27 pF

BILL OF MATERIALS

<u>PART IDENTIFIER</u>	<u>DESCRIPTION 1</u>	<u>DESCRIPTION 2</u>	<u>QTY/ASSY</u>	<u>REFERENCE DESCRIPTION</u>
SF1062A-DEMO	DEMO BOARD, SF1062A,	NORTEL MATRA CELLULAR		
400-1400-001	PCB, DEMO BOARD, SF1081A		1.0000	
400-0533-001	SHIELD, TO-39 TEST FIXTURE		1.0000	
500-0319-001	TAPE, COPPER FOIL, SCOTCH	TYPE 1181, 44F3260, 1/2"	0	
SF1062A-LRIP	FILTER, SM, 211.000 MHZ	NORTEL MATRA	1.0000	
SF1062A-000	ASSY DIAGRAM, DEMO BOARD,	SF1062A	0	
500-0003-180	CAP, CHIP, NPO, 18(J), STD		1.0000	C 1
500-0003-270	CAP, CHIP, NPO, 27(J), STD		1.0000	C 2
500-0248-001	CONN, COAX, FLANGE MT. JACK	4 HOLE	2.0000	J 1, 2
500-0010-560	IND, CHIP, 1008CS, 56 NH, 10%	COIL CRAFT 1008CS-560	1.0000	L 1
500-0010-470	IND, CHIP, 1008CS, 47 NH, 10%		1.0000	L 2
500-0010-120	IND, CHIP, 1008CS, 12 NH, 10%		1.0000	L 3
500-0010-047	IND, CHIP, 1008CS, 10%		1.0000	L4



SIZE

A

FSCM NO.

2U874

DWG NO.

SF1062A-DEMO

SCALE

NONE

W/O or ECN

7387

REV

A

SHEET

1

OF

2

REV HISTORY	
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[illegible]