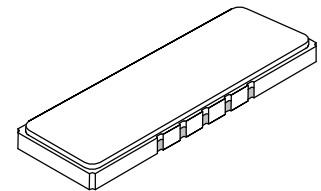




- **Designed for GSM BTS Receiver IF Applications**
- **Low Insertion Loss**
- **Excellent Size-to-Performance Ratio**
- **Hermetic SMP-75 Surface-Mount Case**
- **Unbalanced Input and Output**
- **Complies with Directive 2002/95/EC (RoHS)**

**SF1088A****170.6 MHz
SAW Filter****SMP-75****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
Suitable for lead-free soldering - Max. Soldering Profile	260°C for 30 s	

Electrical Characteristics

Characteristic		Sym	Notes	Min	Typ	Max	Units
Nominal Center Frequency		f _C	1	170.600			MHz
Passband	Insertion Loss at f _C	IL				8.0	dB
	1 dB Passband		1, 2	±90			kHz
	Amplitude Ripple over f _C ±90 kHz					1.0	dB _{p.p}
	Group Delay Variation over f _C ±190 kHz	GDV			<500	1000	ns _{p.p}
Rejection	f _C -0.6 to f _C -0.4 and f _C +0.4 to f _C +0.6 MHz		1, 2, 3	13	15		dB
	f _C -0.8 to f _C -0.6 and f _C +0.6 to f _C +0.8 MHz			27	35		
	f _C -1.6 to f _C -0.8 and f _C +0.8 to f _C +1.6 MHz			40	45		
	f _C -3.0 to f _C -1.6 and f _C +1.6 to f _C +3.0 MHz			43	55		
	f _C -5.8 to f _C -3.0 and f _C +3.0 to f _C +5.8 MHz			47	55		
	f _C -35 to f _C -5.8 and f _C +5.8 to f _C +35 MHz			50	55		
	f _C -75 to f _C -35 and f _C +35 to 75 MHz			45	55		
	DC to f _C -75 and f _C +75 to f _C +1000 MHz			40			
Operating Temperature Range		T _A	1	-10		+85	°C

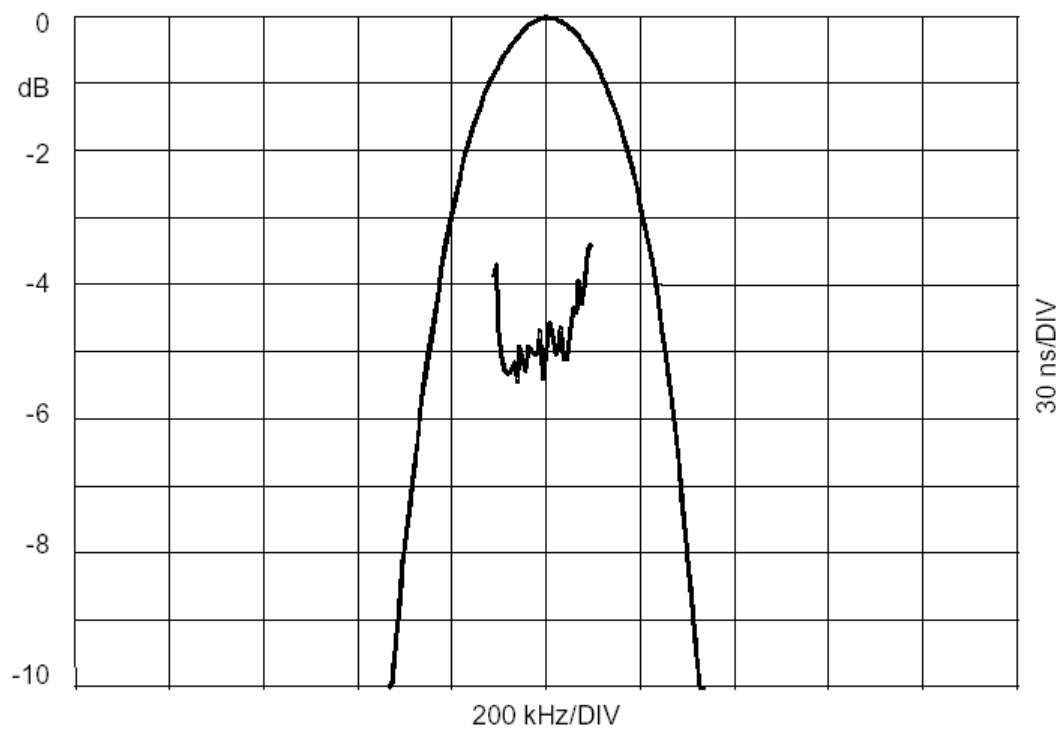
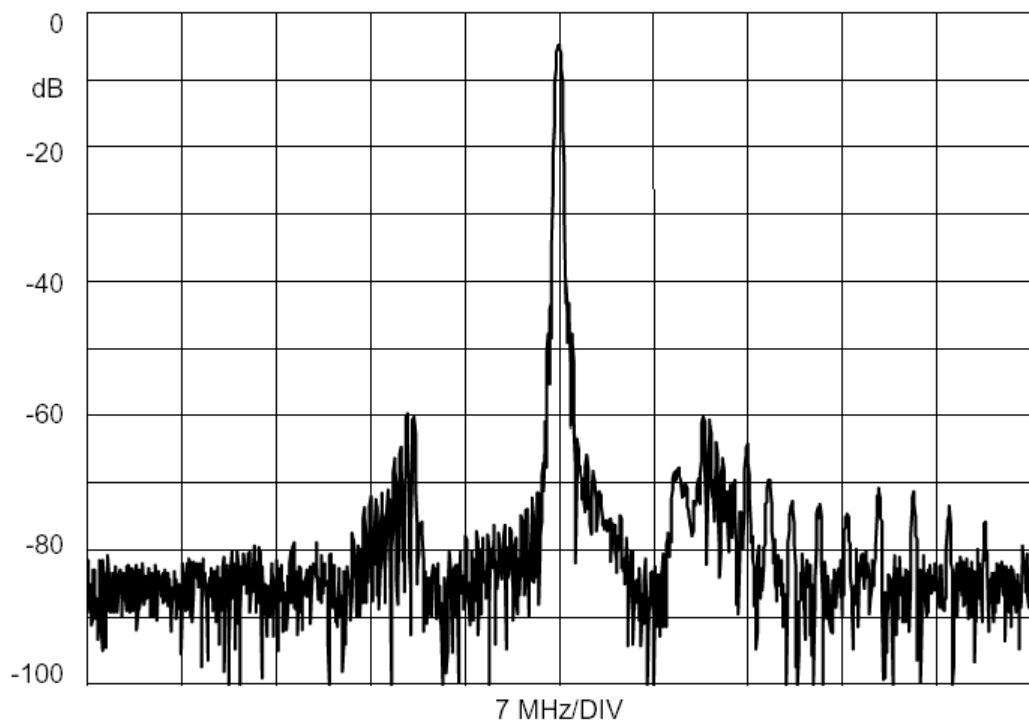
Impedance Matching to 50 Ω unbalanced	External L-C
Case Style	SMP-75 19 x 6.5 mm Nominal Footprint
Lid Symbolization (YY = year, WW = week)	RFM SF1088A YYWW

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, f_C .
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.
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. Electrostatic Sensitive Device. Observe precautions for handling.

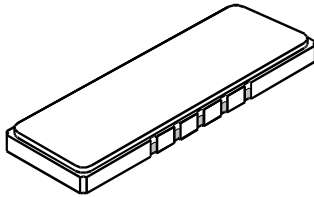
**Electrical Connections**

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



SMP-75 Case

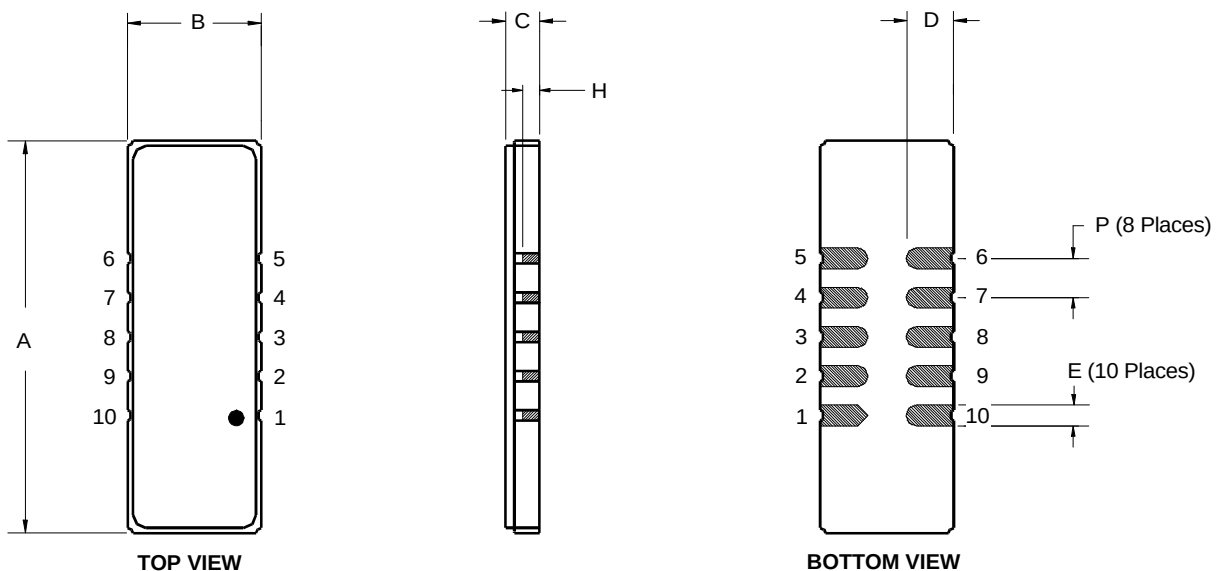
10-Terminal Ceramic Surface-Mount Case
19 x 6.5 mm Nominal Footprint



Case Dimensions						
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	18.80	19.00	19.30	0.740	0.748	0.760
B	6.30	6.50	6.80	0.248	0.256	0.268
C		1.75	2.00		0.069	0.079
D		2.29			0.090	
E		1.02			0.040	
H		1.0			0.039	
P		1.905			0.075	

Materials	
Solder Pad Termination	Au plating 30 - 60 μ inches (76.2-152 μ m) over 80-200 μ inches (203-508 μ m) Ni.
Lid	Fe-Ni-Co Alloy Electroless Nickel Plate (8-11% Phosphorus) 100-200 μ inches Thick
Body	Al ₂ O ₃ Ceramic
Pb Free	

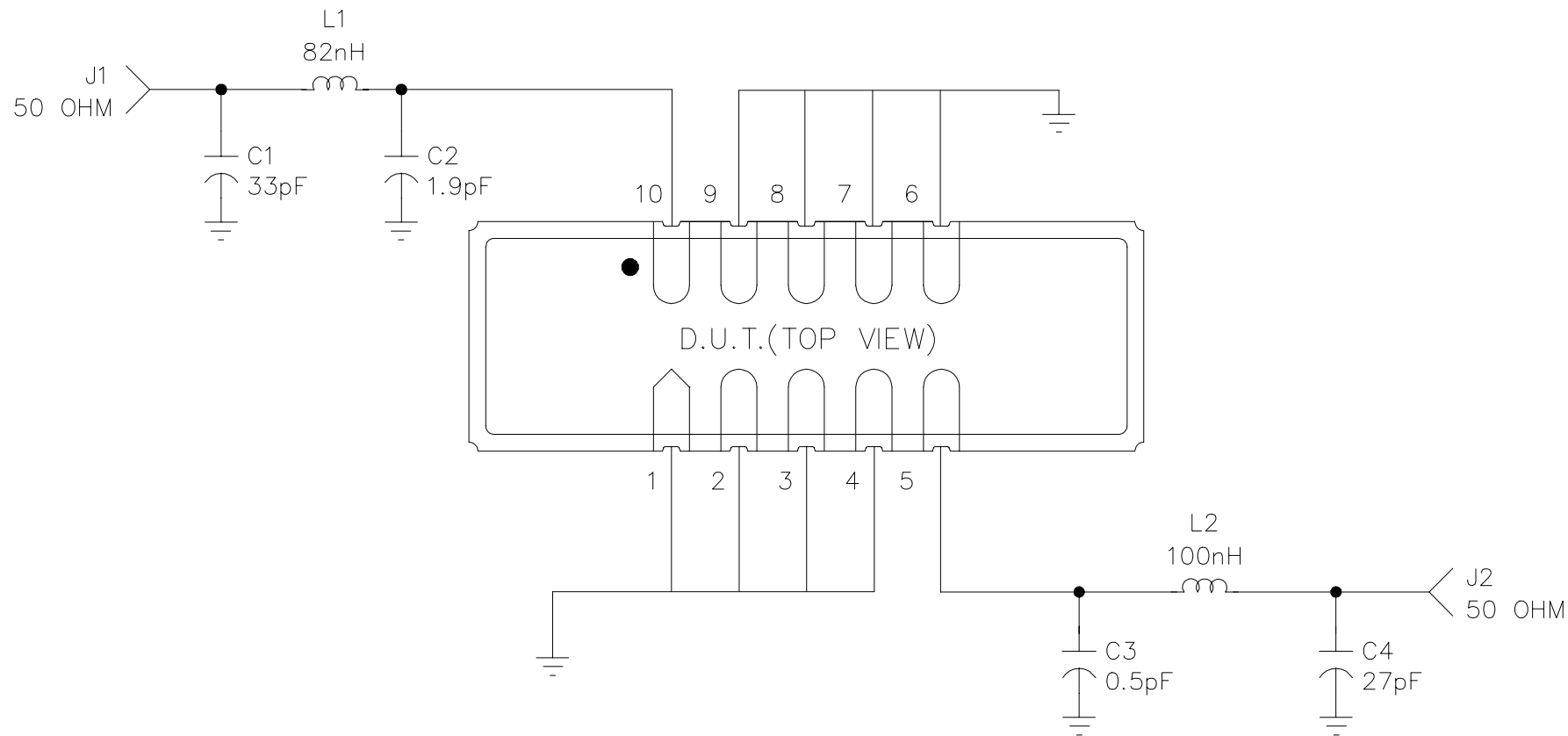
Electrical Connections		
Connection		Terminals
Port 1	Input or Return	10
	Return or Input	1
Port 2	Output or Return	5
	Return or Output	6
Ground		All others
Single Ended Operation		Return is ground
Differential Operation		Return is hot



NOTES:

1. NOTE PROPER ORIENTATION OF INDUCTORS L1 & L2. THEY ARE TO BE POSITIONED 90° TO EACH OTHER.
2. SOLDER SURFACE MOUNT PACKAGE TO TEST SIDE OF PCB. SOLDER 10 PLACES AS SHOWN.
3. PACKAGE PIN 10 INDICATOR

REV	ECN NO.	DESCRIPTION	DATE
A	6724	INITIAL RELEASE	5/28/98
B	7000	ROTATE VIEW 180	3SEP98



DRAWN BY/DATE: J. LAYTON 05/28/98

TITLE: ASSEMBLY DIAGRAM, SF1088A(DEMO)

RF Monolithics, Inc.
DALLAS, TEXAS 75244

CHECKED/APPROVED

SIZE
A

CODE IDENT
2U874

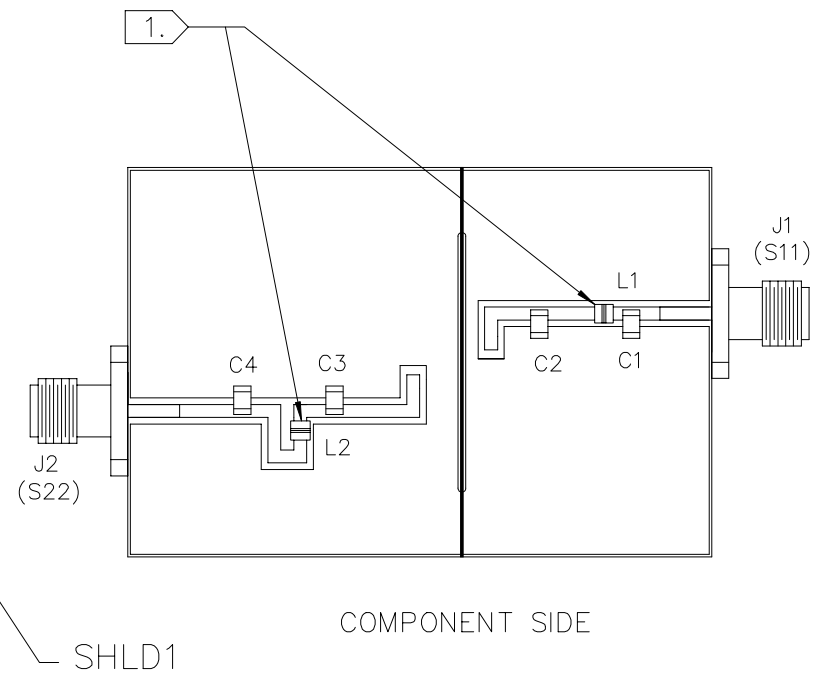
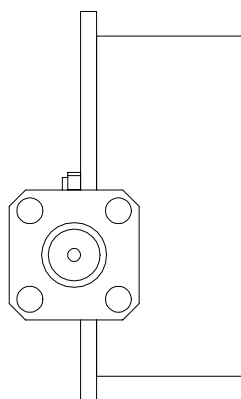
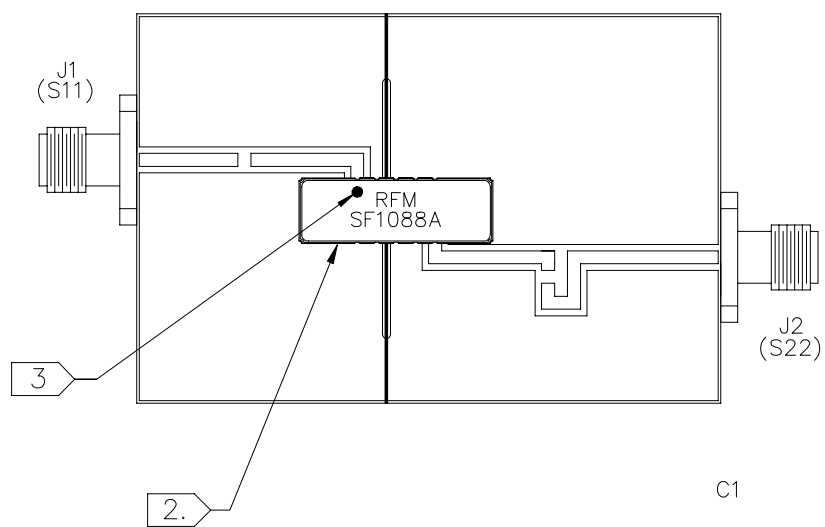
DWG.
NO.

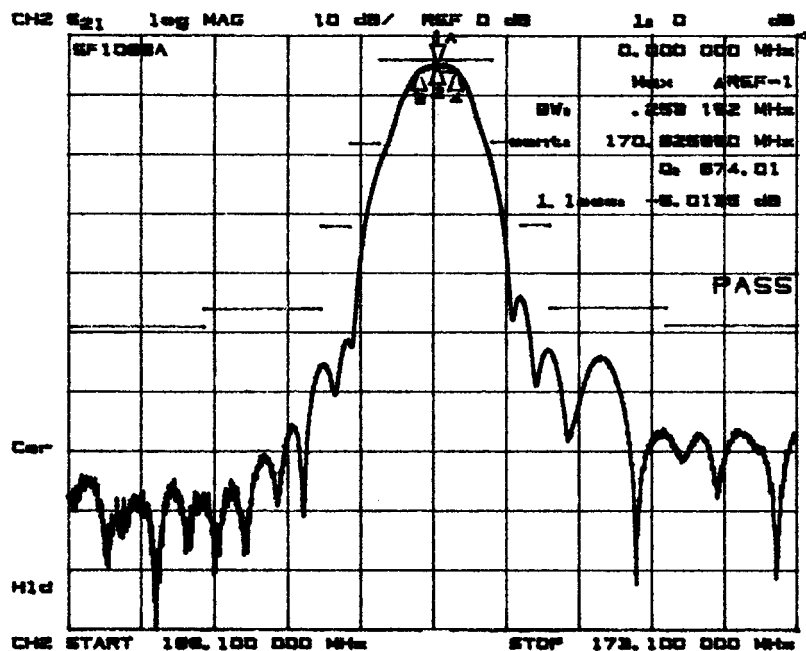
SF1088A-000

REV
B

SHEET
1/3

TEST SIDE

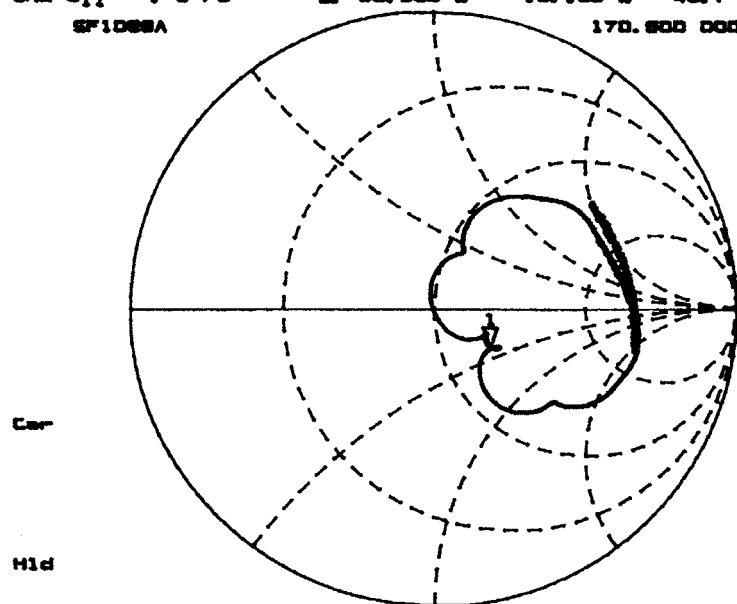




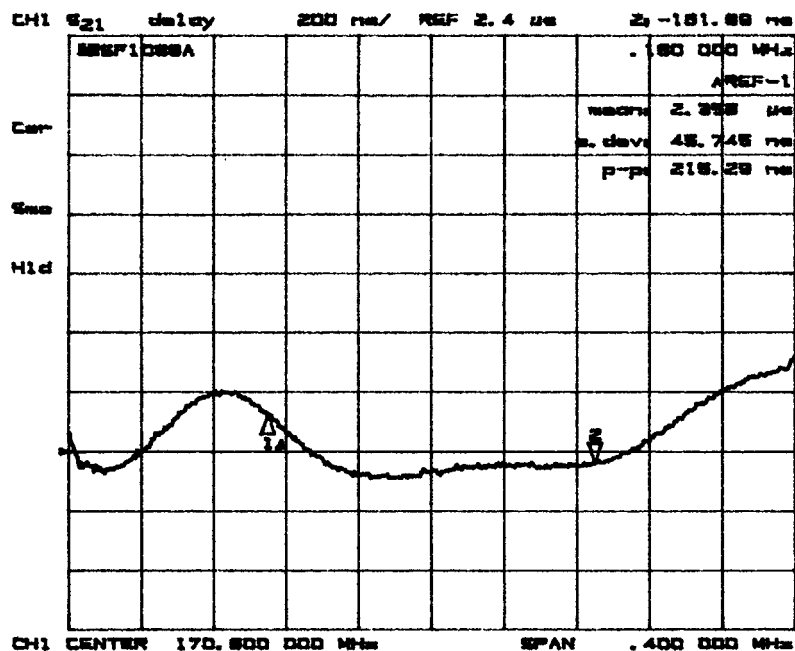
CH2 S₁₁ 1 U FS 1.0 50.000 Ω -18.188 Ω 48.7 pF

SF1088A

170.800 000 MHz



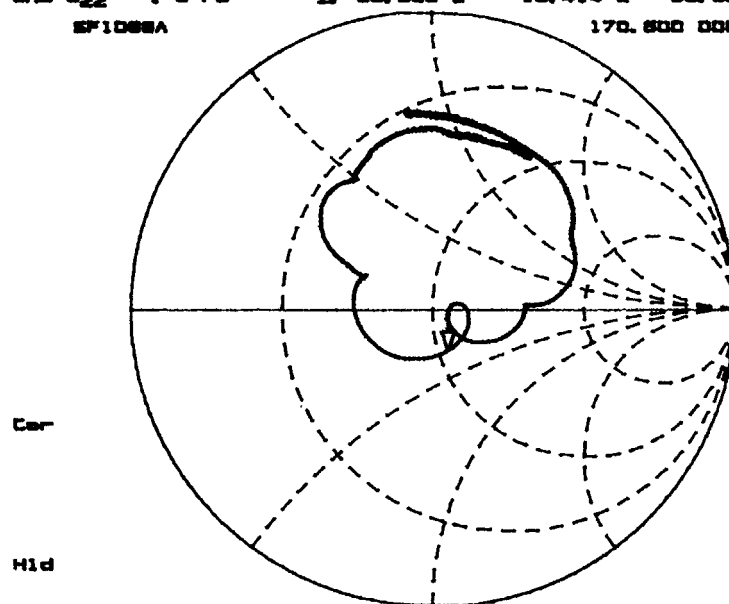
CH2 START 166.100 000 MHz STOP 173.100 000 MHz



CH2 S₂₂ 1 U FS 1.0 50.000 Ω -18.414 Ω 50.524 pF

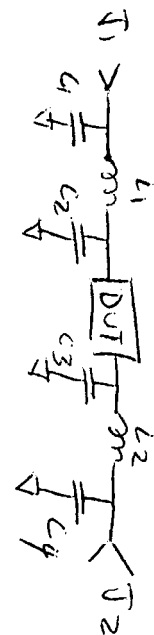
SF1088A

170.800 000 MHz



CH2 START 166.100 000 MHz STOP 173.100 000 MHz

SF1088A
(DEMO)
4-28-98



L₁ = 82 nH
L₂ = 100 nH
C₁ = 33 pF
C₂ = 1.9 pF
C₃ = 0.5 pF
C₄ = 27 pF

REV: #8 SLT 3/3

BILL OF MATERIALS

<u>PART IDENTIFIER</u>	<u>DESCRIPTION 1</u>	<u>DESCRIPTION 2</u>	<u>QTY/ASSY</u>	<u>REFERENCE DESCRIPTION</u>
SF1088A-DEMO	DEMO BOARD,SF1088A			
400-1387-001	PCB,DEMO BOARD,19MM		1.0000	
400-0533-001	SHIELD,TO-39 TEST FIXTURE		1.0000	
SF1088A-000	ASSY DIAGRAM,DEMO BOARD,	SF1088A	0	
SF1088A-LRIP	FILTER,SM,170.600MHZ		1.0000	
500-0003-330	CAP,CHIP,NPO,33(J),STD		1.0000	C 1
500-0003-019	CAP,CHIP,NPO,1.9(C),STD		1.0000	C 2
500-0003-005	CAP,CHIP,NPO,0.5(C),STD		1.0000	C 3
500-0003-270	CAP,CHIP,NPO,27(J),STD		1.0000	C 4
500-0248-001	CONN,COAX,FLANGE MT.JACK	4 HOLE	2.0000	J 1,2
500-0781-820	IND,CHIP,0805CS,82NH,2%		1.0000	L 1
500-0781-101	IND,CHIP,0805CS,100NH,2%		1.0000	L 2



SIZE

A

FSCM NO.

2U874

DWG NO.

SF1088A-DEMO

SCALE

NONE

W/O or ECN

6724

REV

A

SHEET

1

OF

2

REV HISTORY	
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[illegible]

		SIZE A	FSCM NO. 2U874	DWG NO. SF1088A-DEMO	
	SCALE NONE	W/O or ECN 6724		REV A	SHEET 2 OF 2



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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