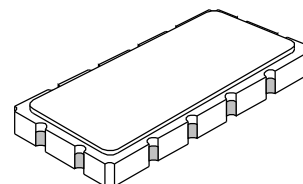


SF1099A 280 MHz SAW Filter



PRELIMINARY

- Designed for WLL Receiver IF
- Hermetic 13.3 x 6.5 mm Surface-Mount Case
- Unbalanced Input and Output



Characteristic	Sym	Min	Typ	Max	Units	Notes
Nominal Center Frequency	f_c		280.000		MHz	1
Passband	Insertion Loss at f_c		11	14.0	dB	1, 2
	3 dB Passband					
	BW_3	± 1350	± 1500		kHz	
	Amplitude Ripple over $f_c \pm 1100$ kHz			1.0	dB _{P-P}	
	Group Delay Variation over $f_c \pm 1350$ kHz			150	ns _{P-P}	
Rejection	TBD to $f_c - 2.7$ MHz and $f_c + 2.7$ MHz to TBD	40			dB	1, 2, 3
Operating Temperature Range	T_A	-40		+85	°C	1

Impedance Matching to 50 Ω unbalanced	External L-C
Case Style	SM13365-12 13.3 x 6.5 mm Nominal Footprint
Lid Symbolization (YY = year, WW = week) See note 4	RFM SF1099A 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

Connection	Terminals
Port 1 Hot	2
Port 1 Gnd Return	3
Port 2 Hot	8
Port 2 Gnd Return	9
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, 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. 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.

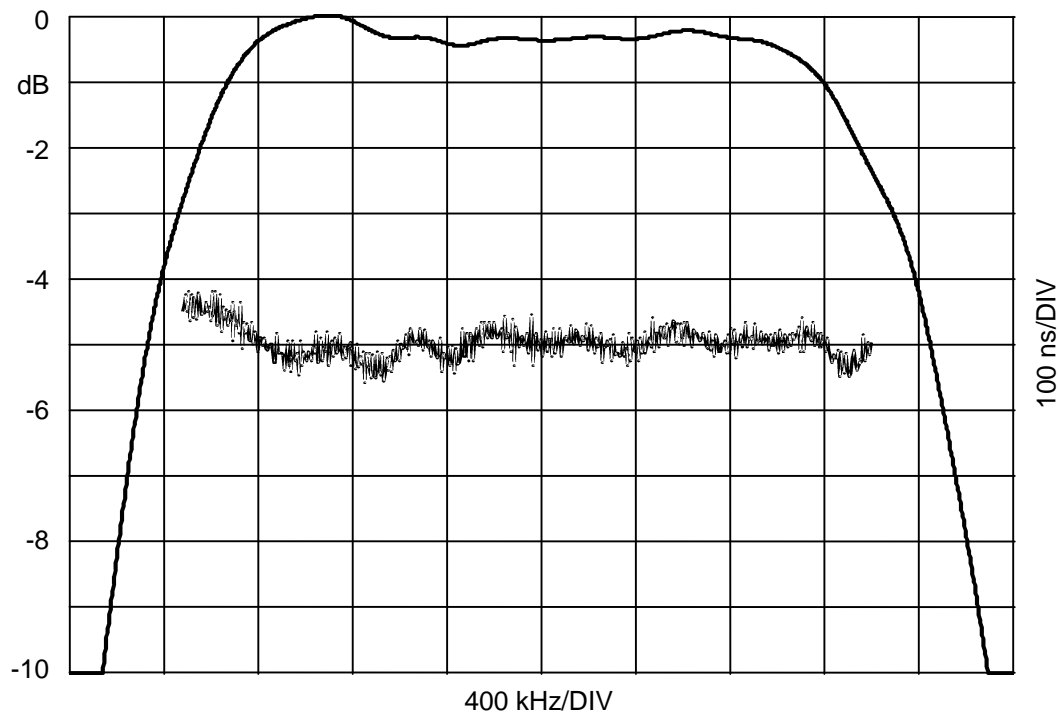
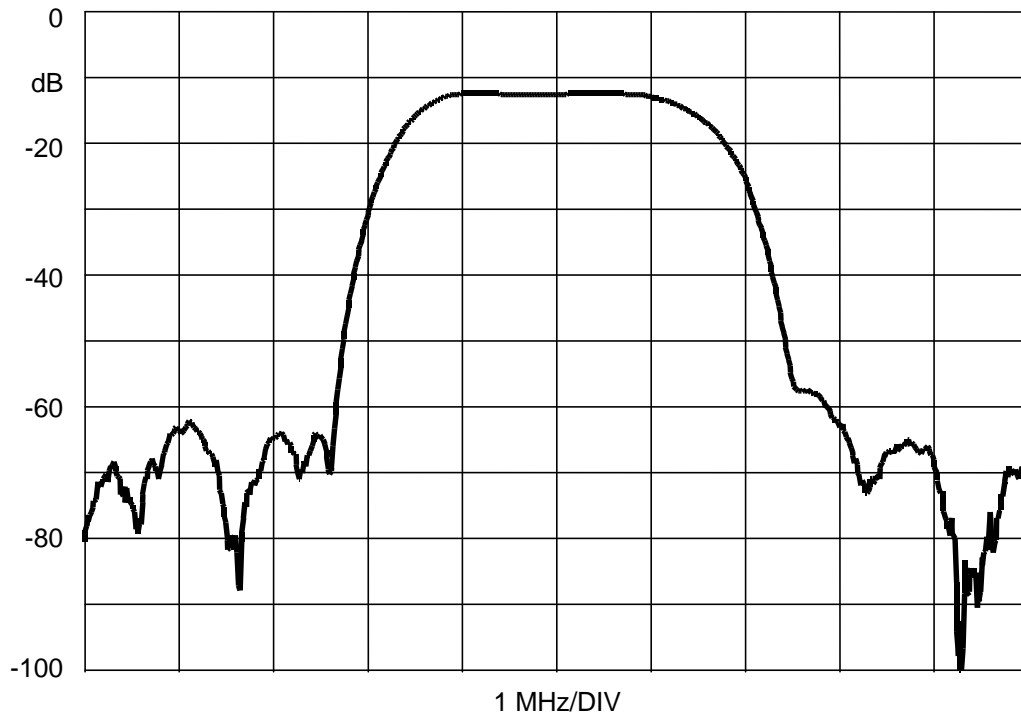


RF Monolithics, Inc.
4347 Sigma Road
Dallas, Texas 75244
USA

Phone: +1(972)233-2903
Fax: +1(972)387-8148
e-mail: info@rfm.com
Home page: www.rfm.com

European Sales Office
44 1963 251383
44 1963 251510

SF1099A 280 MHz SAW Filter

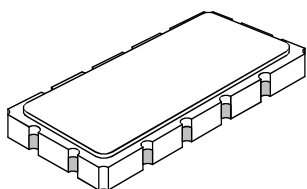


RF Monolithics, Inc.
4347 Sigma Road
Dallas, Texas 75244
USA

Phone: +1(972)233-2903
Fax: +1(972)387-8148
e-mail: info@rfm.com
Home page: www.rfm.com

European Sales Office
44 1963 251383
44 1963 251510

12-Terminal Ceramic Surface-Mount Case 13.3 x 6.5 mm Nominal Footprint

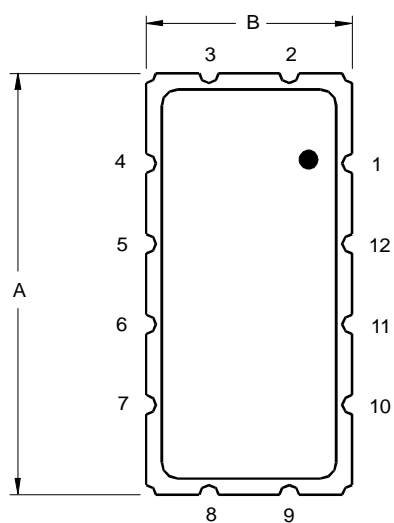


Case Dimensions

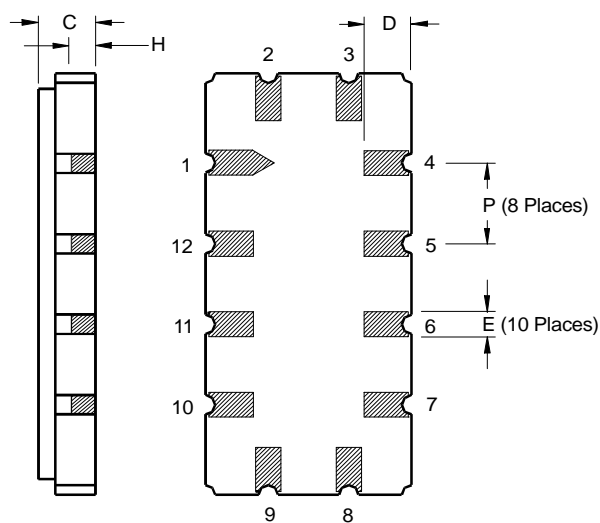
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	13.08	13.31	13.60	0.515	0.524	0.535
B	6.27	6.50	6.80	0.247	0.256	0.268
C		1.91	2.00		0.075	0.079
D		1.50			0.059	
E		0.79			0.031	
H		1.0			0.039	
P		2.54			0.100	

Electrical Connections

Connection		Terminals
Port 1	Input or Return	2
	Return or Input	3
Port 2	Output or Return	8
	Return or Output	9
Ground		All others
Single Ended Operation		Return is ground
Differential Operation		Return is hot



TOP VIEW



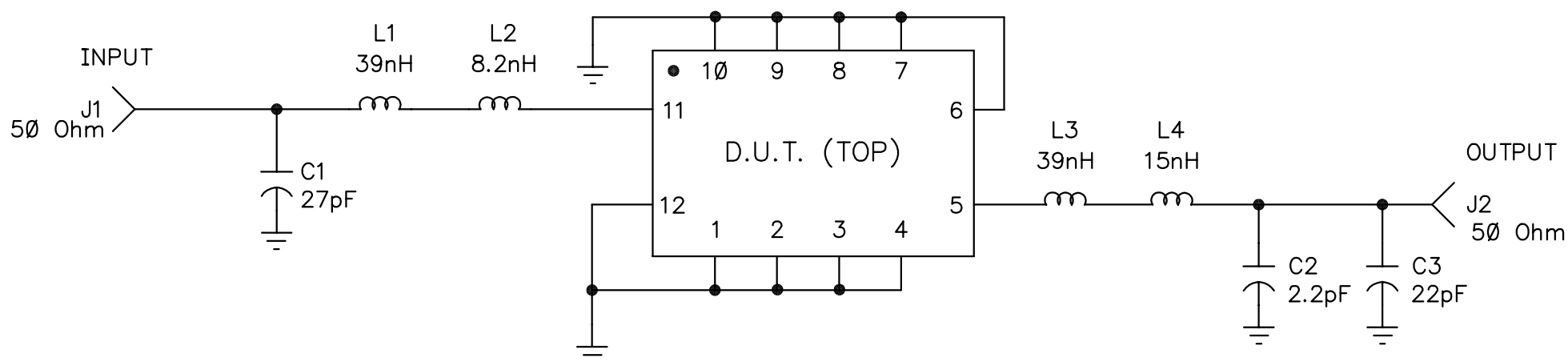
BOTTOM VIEW

NOTES:

1. NOTE PROPER ORIENTATION OF INDUCTORS L1 AND L2.
THEY ARE TO BE POSITIONED 90° TO EACH OTHER.

2. SOLDER SURFACE MOUNT PACKAGE TO TEST SIDE
OF PCB. SOLDER 12 PLACES AS SHOWN.

REV	ECN NO.	DESCRIPTION	APP/DATE
A	8795	NEW RELEASE	Ø3augØØ



DRAWN BY/DATE: J.F.Christopherson Ø3augØØ

TITLE: SF1Ø99A DEMO BOARD

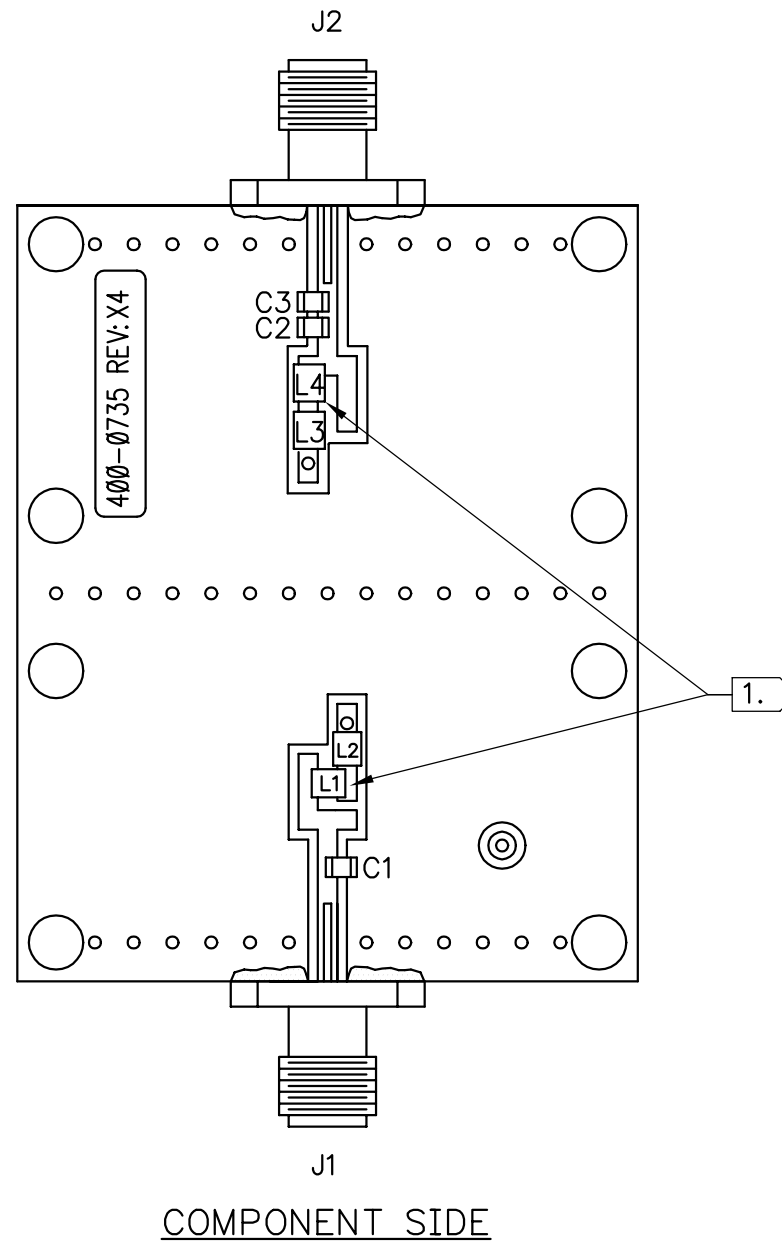
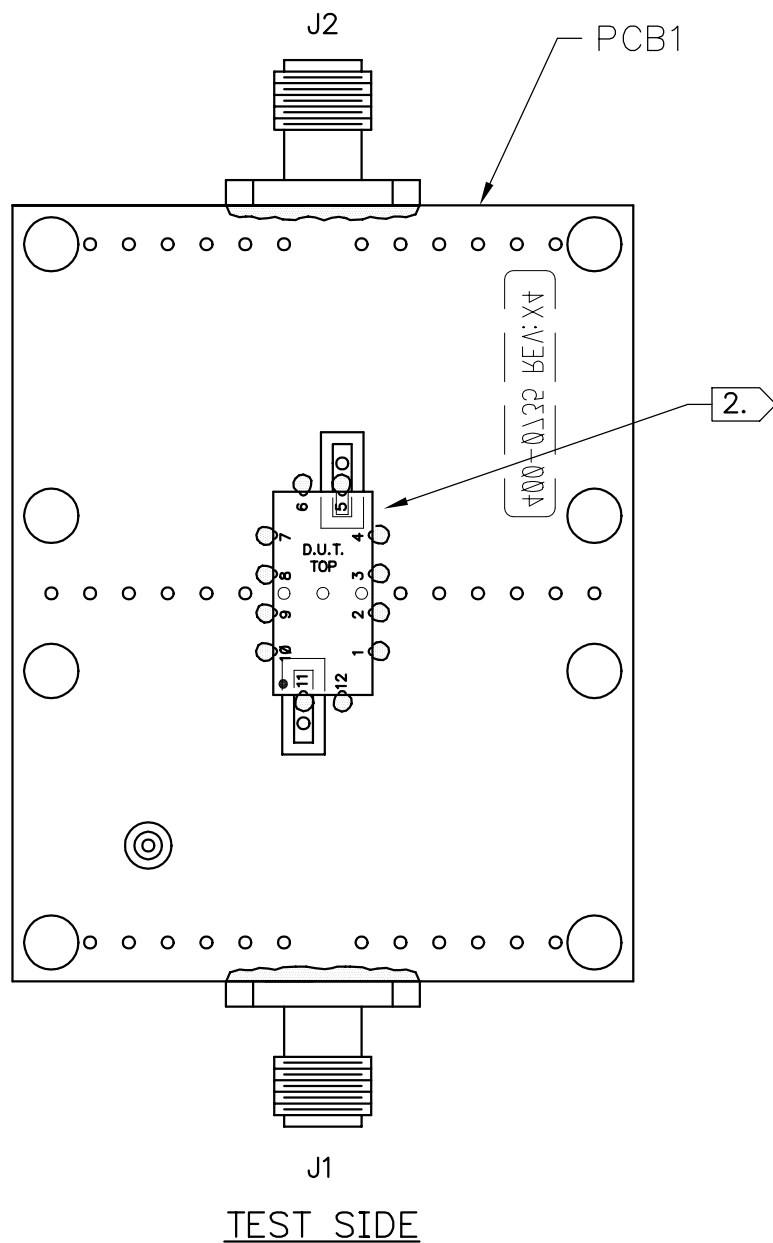
RF Monolithics, Inc.
DALLAS, TEXAS 75244

CHECKED/APPROVED

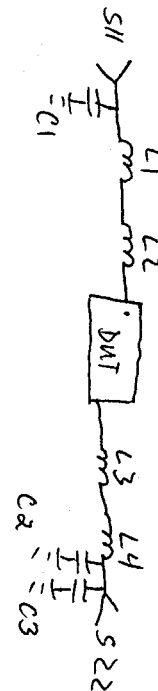
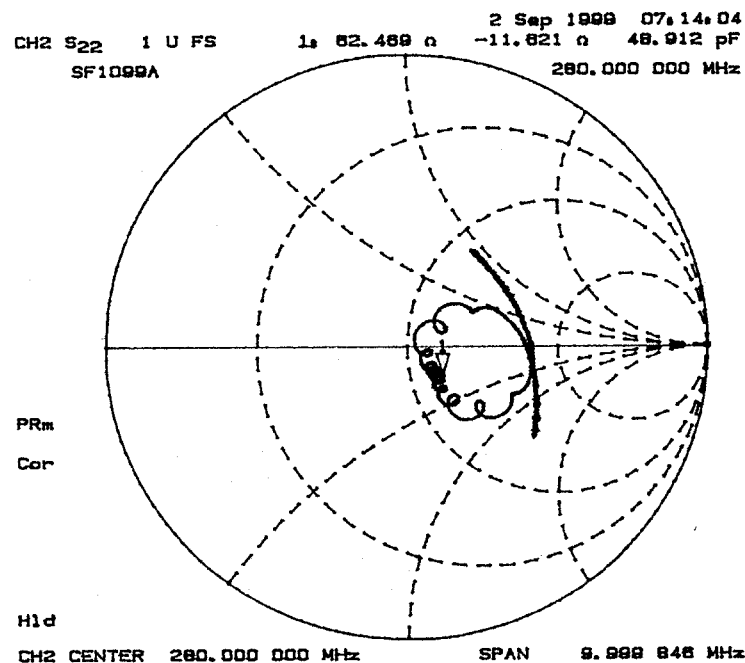
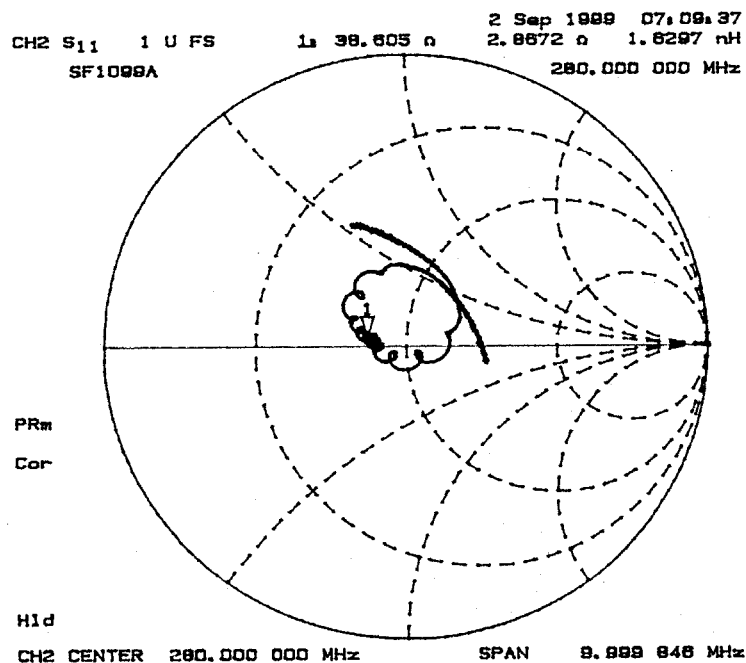
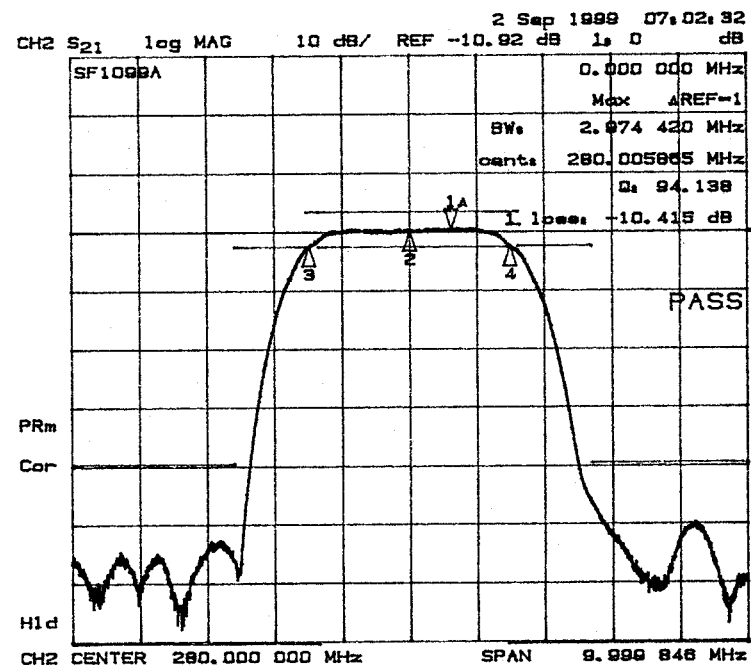
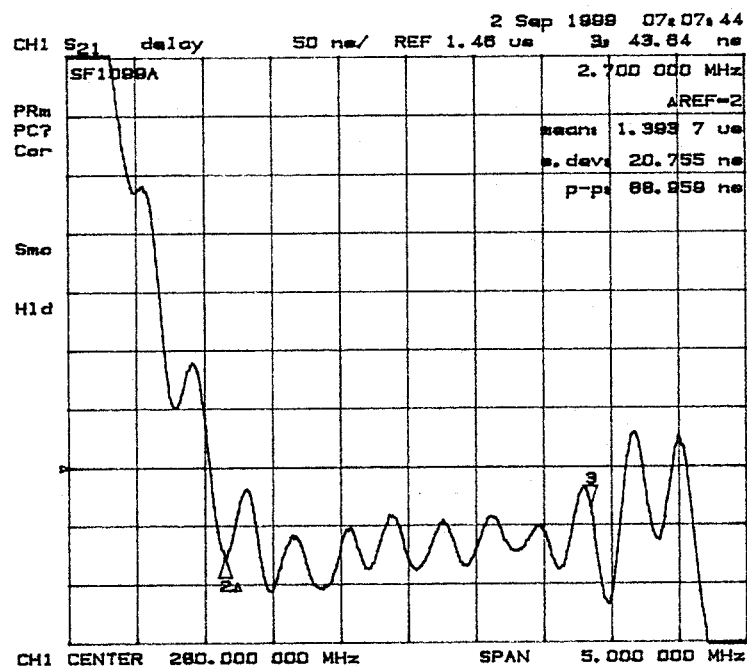
SIZE **A**
CODE IDENT **2U874**

DWG. NO. SF1Ø99A-ØØØ

REV **A** SHEET 1/4



SF1099A-DEMO
 DEMO BRD. #3
 9-2-99
 @



C1=27pF.
 C2=2.2 pF.
 C3=22 pF.
 L1=39 nH
 L2=8.2 nH
 L3=39 nH
 L4=15 nH

SF1099A - DEMO
 DEMO BRD. #3
 9-2-99
 @

