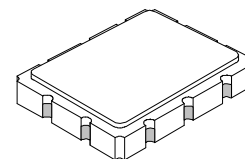


SF1075A 190 MHz SAW Filter



- Designed for GSM BTS Transmitter Applications
- Low Insertion Loss
- 9.1 x 7.1 mm Surface-Mount Case
- Unbalanced Input and Output



Characteristic	Sym	Min	Typ	Max	Units	Notes
Nominal Center Frequency	fc		190.000		MHz	1
Passband	Insertion Loss at fc	IL	9	12.0	dB	1, 2
	2 dB Passband	BW ₂	±100		kHz	
	3 dB Passband	BW ₃	±550			
	Amplitude Ripple over fc ±250 kHz				dB _{P-P}	
	Group Delay Variation over fc ±100 kHz	GDV	<200	300	ns _{P-P}	
Rejection	fc-6.0 to fc-1.8 and fc+1.8 to fc+6.0 MHz		4		dB	1, 2, 3
	fc-10 to fc-6.0 and fc+6.0 to fc+10 MHz		9	35		
	Ultimate		45	50		
Operating Temperature Range	T _A	-10		+60	°C	1

Impedance Matching to 50 Ω unbalanced	External L-C
Case Style	SM9171-10 9.1 x 7.1 mm Nominal Footprint
Lid Symbolization (XX = 2-character date code)	RFM SF1075A XX

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	10
Port 1 Gnd Return	1
Port 2 Hot	5
Port 2 Gnd Return	6
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 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.

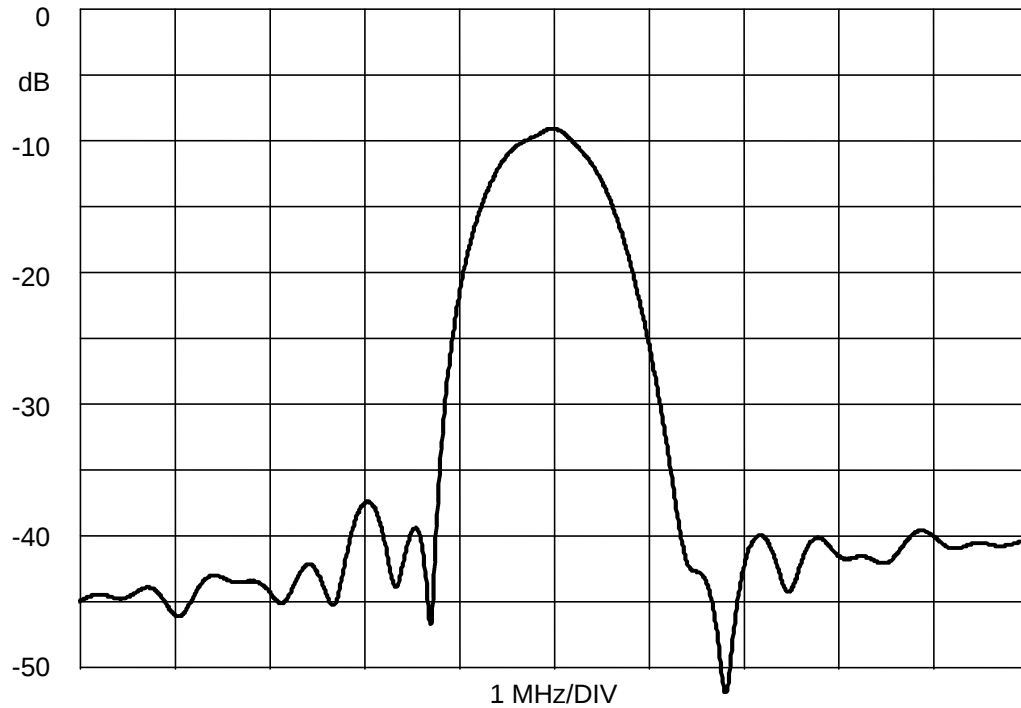


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European Sales Office
44 1963 251383
44 1963 251510

SF1075A 190 MHz SAW Filter

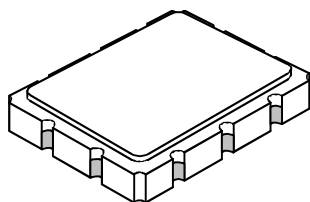


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10-Terminal Ceramic Surface-Mount Case 9.1 x 7.1 mm Nominal Footprint

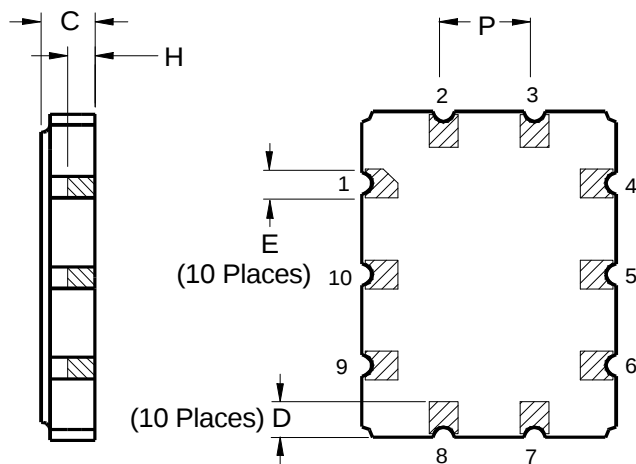
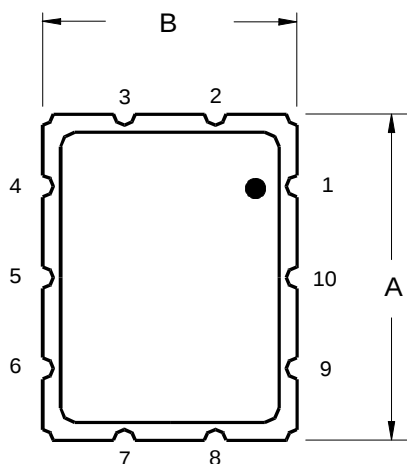


Case Dimensions

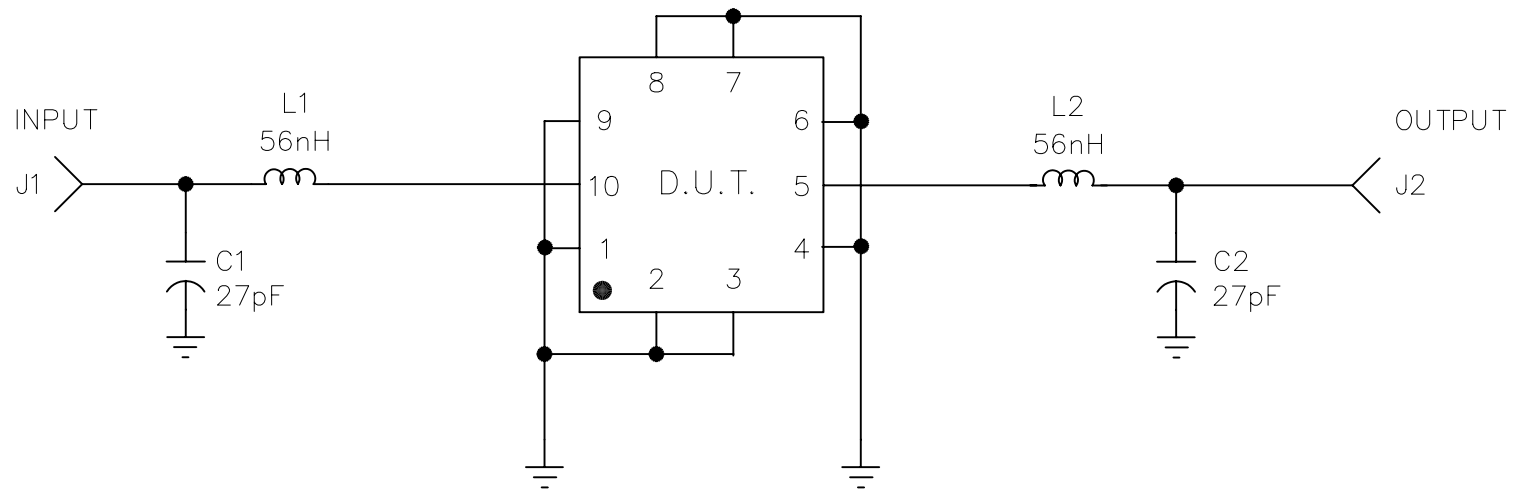
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	8.86	9.09	9.40	0.349	0.358	0.370
B	6.88	7.11	7.40	0.271	0.280	0.291
C		1.91	2.00		0.075	0.079
D		0.99			0.039	
E		0.79			0.031	
H		1.0			0.039	
P		2.54			0.100	

Electrical Connections

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



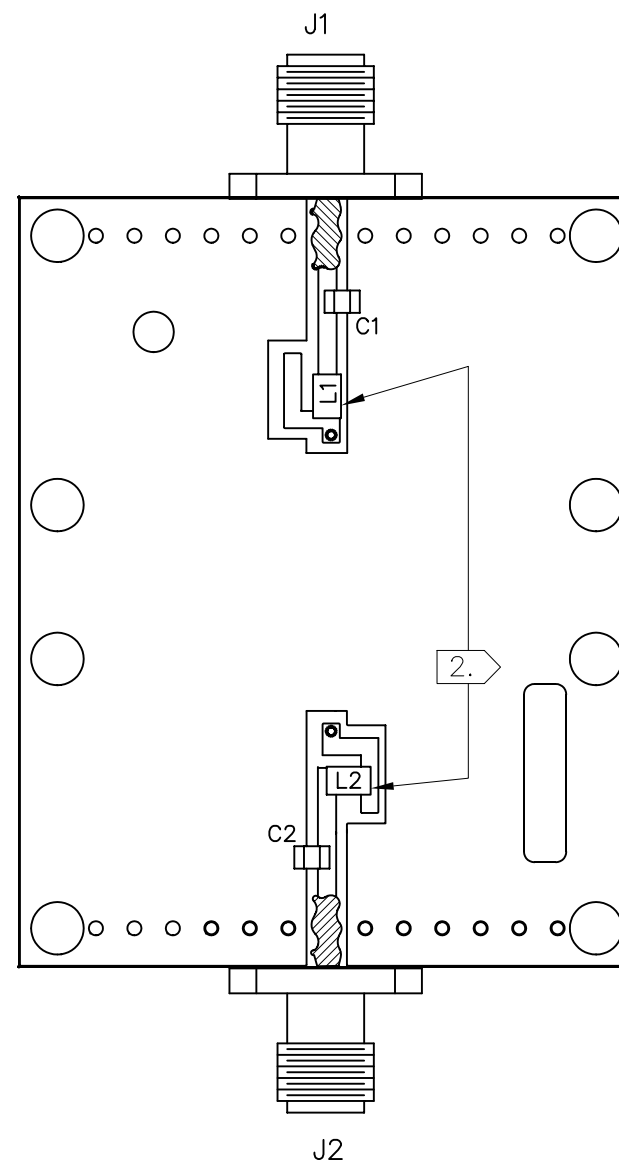
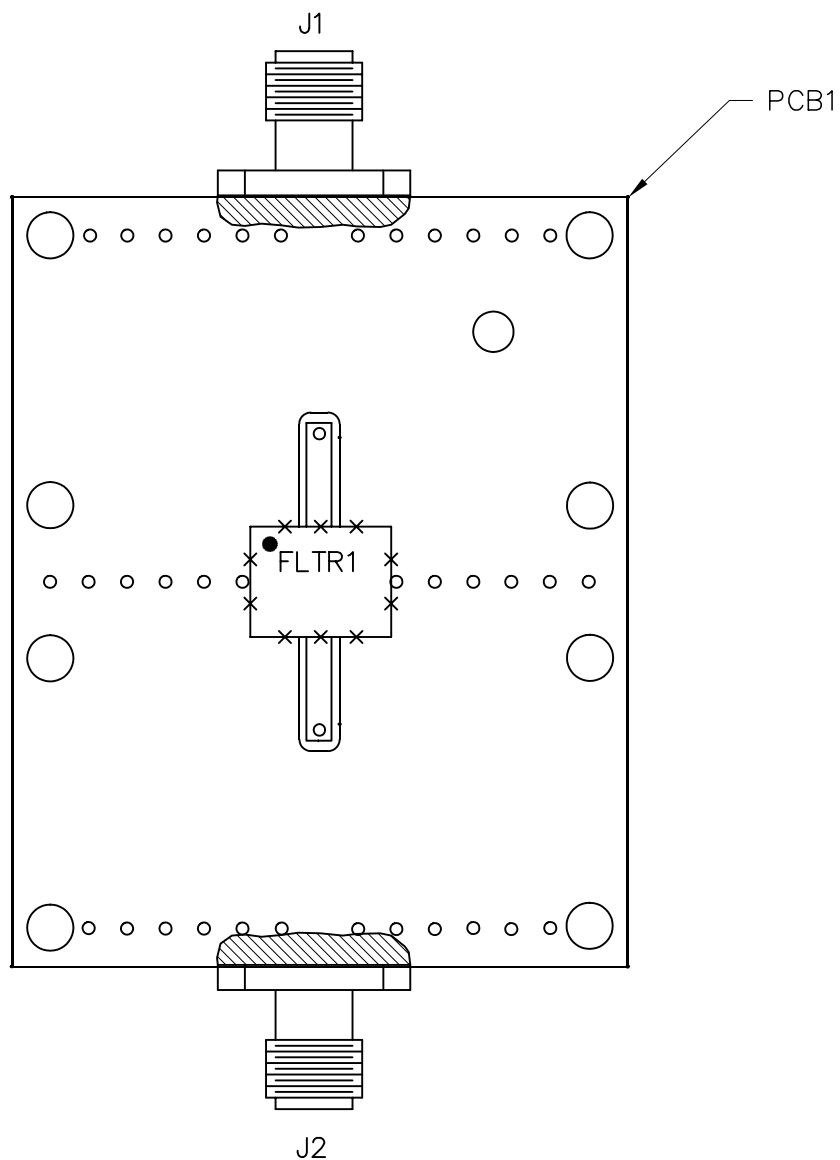
REV	ECN NO.	DESCRIPTION	APP/DATE
A	4928	INITIAL RELEASE	

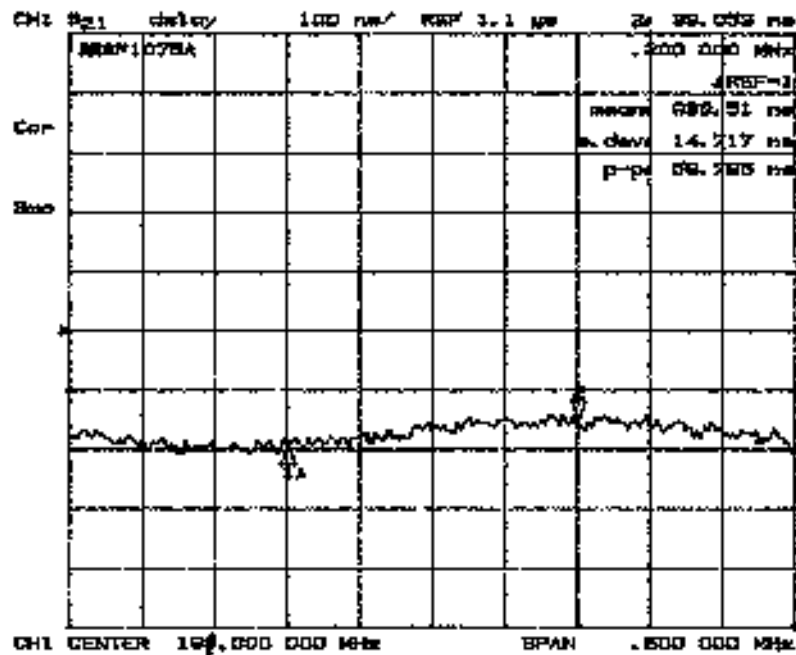


DRAWN BY/DATE: J.J. LAYTON 10/02/96			TITLE: ASSY DIAGRAM – SF1075A(DEMO)		
RF Monolithics, Inc. DALLAS, TEXAS 75244	CHECKED/APPROVED	SIZE A	CODE IDENT 2U874	DWG. NO. SF1075A–000	REV A
					SHEET 1/3

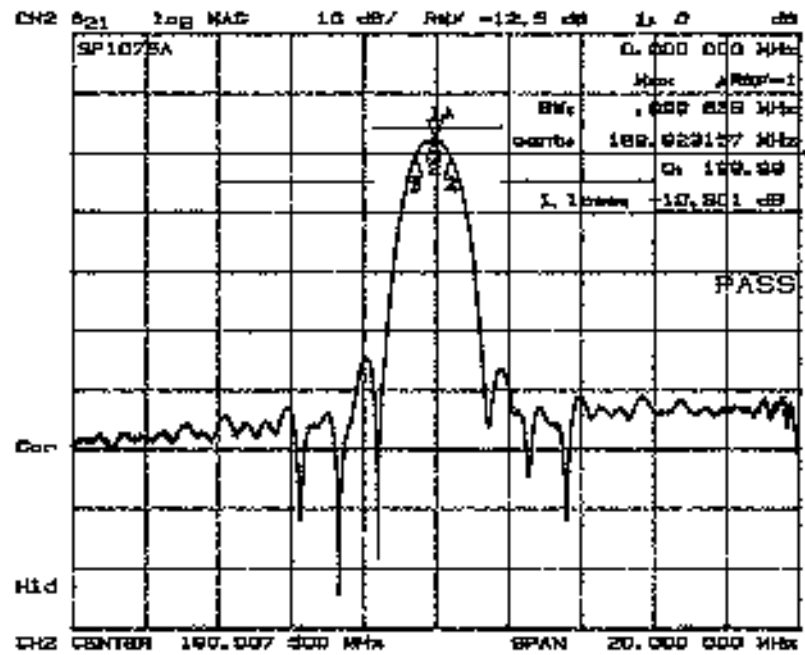
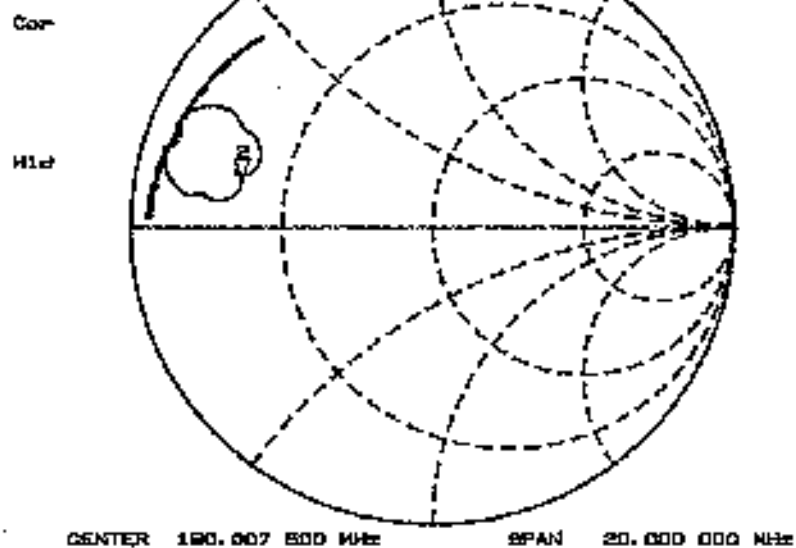
NOTES:

1. SOLDER MOUNT COMPONENTS, CONNECTORS, TO PCB1
2. NOTE PROPER ORIENTATION OF INDUCTORS [L1, L2] SHOULD BE 90° TO EACH OTHER.
3. COMPONENTS MAY NEED TO BE TRADED FOR SLIGHTLY HIGHER OR LOWER VALUES DUE TO TOLERANCE LEVELS OF EACH INDEPENDENT COMPONENT.

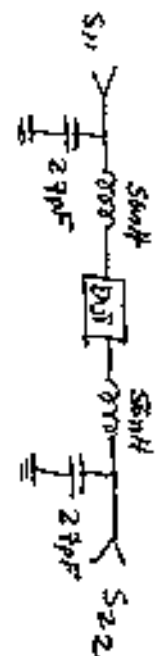
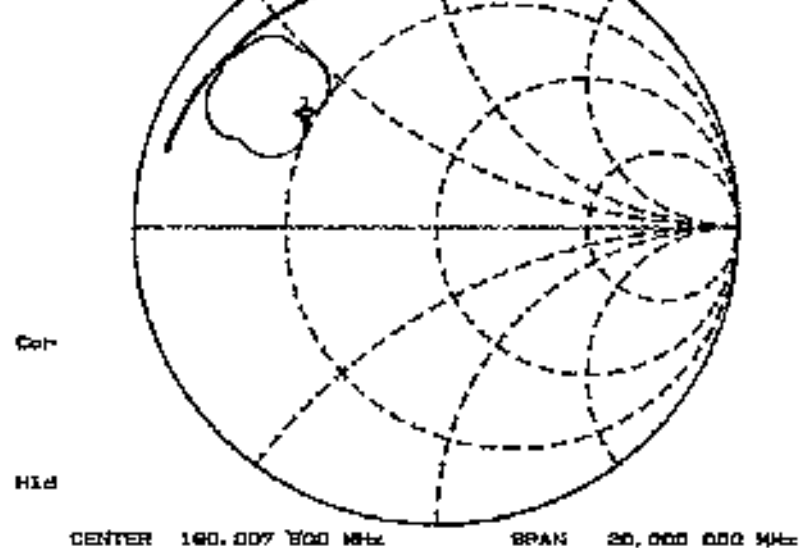




CH1 S_{11} 1 U F3 2r 10.724 α 3.0092 α 4.0075 mH
 SP1075A 100.100 000 MHz



CH2 S_{22} 1 U F3 1s 10.481 α 13.144 α 12.082 mH
 SP1075A 100.047 500 MHz



BILL OF MATERIALS

<u>PART IDENTIFIER</u>	<u>DESCRIPTION 1</u>	<u>DESCRIPTION 2</u>	<u>QTY/ASSY</u>	<u>REFERENCE DESCRIPTION</u>
SF1075A(DEMO)	DEMO BOARD,SF1075A	ERICSSON RADIO		
SF1075A-000	ASSY DIAGRAM,DEMO,SF1075A		0	
400-1188-002	CHASSIS ASSY,9.1 X 7.1MM	2 PIN	1.0000	CHAS1
500-0003-270	CAP,CHIP,NPO,27(J),STD		2.0000	C 1,2
500-0010-560	IND,CHIP,1008CS,56NH,10%	COIL CRAFT 1008CS-560	2.0000	L 1,2



SIZE
A

FSCM NO.
2U874

DWG NO.
SF1075A(DEMO)

SCALE **NONE**

W/O or ECN **4928**

REV **A**

SHEET **1** OF **2**

REV HISTORY	
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[illegible]

		SIZE A	FSCM NO. 2U874	DWG NO. SF1075A(DEMO)	
	SCALE NONE	W/O or ECN 4928		REV A	SHEET 2 OF 2