



RF1353C

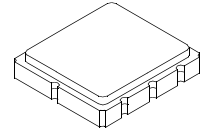
- *Designed for 345 MHz Wireless Applications*
- *Advanced (Lithium Tantalate) LiTaO3 design for low Insertion Loss*
- *Designed for match to 50 ohms, no external LC required*
- *Hermetically sealed Surface Mount package*
- *Complies with Directive 2002/95/EC (RoHS)*



**345.00 MHz
SAW Filter**

Absolute Maximum Ratings

Rating	Value	Units
Maximum Input Power	+10	dBm
DC Voltage Between Terminals	30	VDC
Case Temperature	-40 to +85	°C



SM5050-8 Case

Electrical Characteristics

Characteristic	Sym	Notes	Minimum	Typical	Maximum	Units
Nominal Operating Frequency	f_c			345		MHz
Passband	IL	Insertion Loss			4.5	dB
		3.0 dB Bandwidth	$F_c \pm 70$	$F_c \pm 430$	$F_c \pm 1100$	kHz
Rejection		$F_c - 10.7$ MHz	15			dB
		$F_c - 21.4$ MHz	40			dB
Matching		Untuned response		50		Ω
Ambient Temperature		Operating Range	-10		70	°C
Footprint Size: 5.0 X 5.0	SM5050-8					
Lid Symbolization (YY=Year, WW=week, S=shift)	RFM, 446, YYWWS					

Electrical Connections

Connection	Terminals
RF Input	2
RF Output	6
Case Ground	All Others



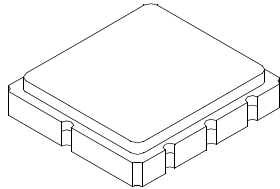
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

Notes:

1. All specifications apply over the operating temperature range with filter soldered to the specified demonstration board unless noted otherwise.
2. Ultimate rejection is dependent on PCB layout.
3. Specifications subject to change without notice.
4. Electrostatic Sensitive Device. Observe precautions for handling.
5. US and international patents may apply.
6. RFM, RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.

SM5050-8 Case

8-Terminal Ceramic Surface-Mount Case 5.0 X 5.0 mm Nominal Footprint



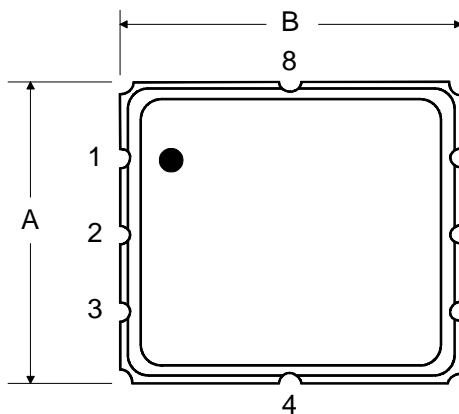
Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	4.8	5.0	5.2		0.1968	
B	4.8	5.0	5.2		0.1968	
C			1.7			0.0669
D		2.08			0.0818	
E		1.17			0.046	
F		0.64			0.0252	
G	2.39	2.54	2.69		0.100	

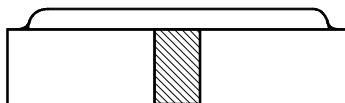
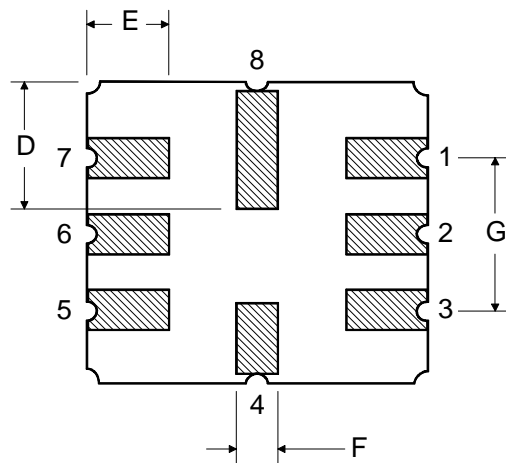
Electrical Connections

Connection		Terminals
Port 1	Differential Input	1, 2
Port 2	Differential Output	5, 6
	Ground	All others
Single Ended Operation		Return is ground
Differential Operation		Return is hot
Dot indicates Pin 1		

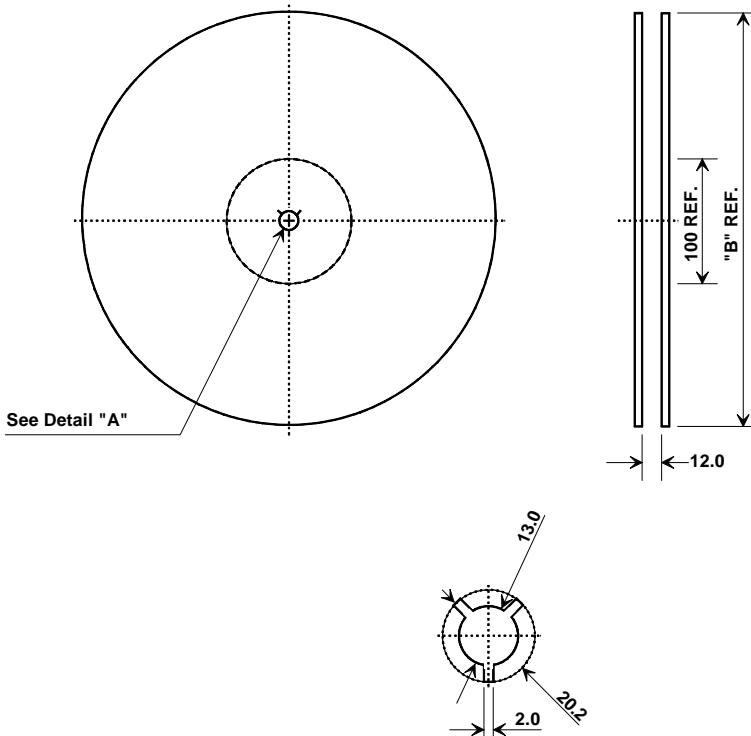
TOP VIEW



BOTTOM VIEW



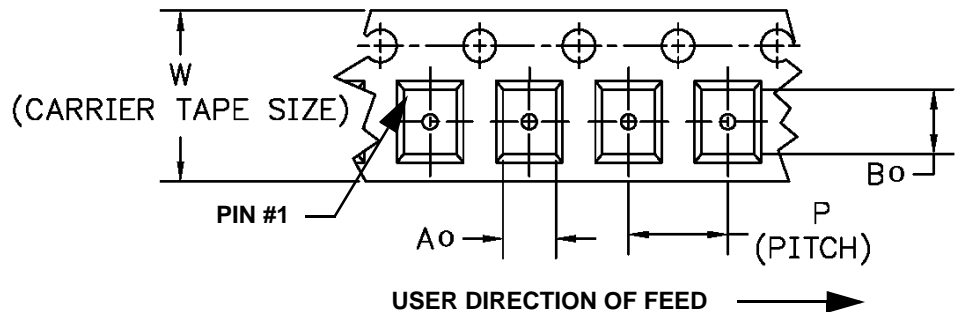
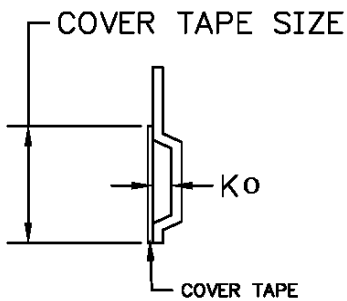
Tape and Reel Specifications



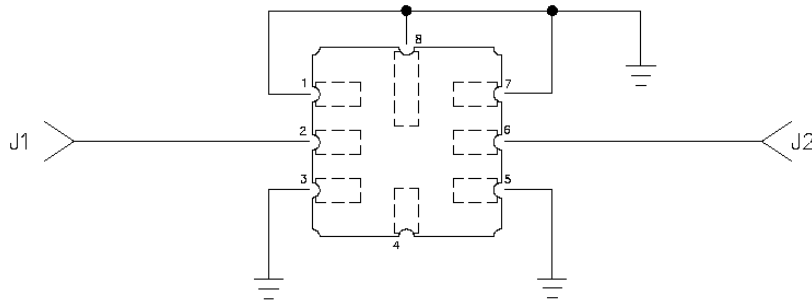
"B" Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	1000
13	330	3000

COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	5.3 mm
Bo	5.3 mm
Ko	2.0 mm
Pitch	8.0 mm
W	12.0 mm



REV	ECN NO.	DESCRIPTION	APP/DATE
A	11015	RELEASE	25sep02

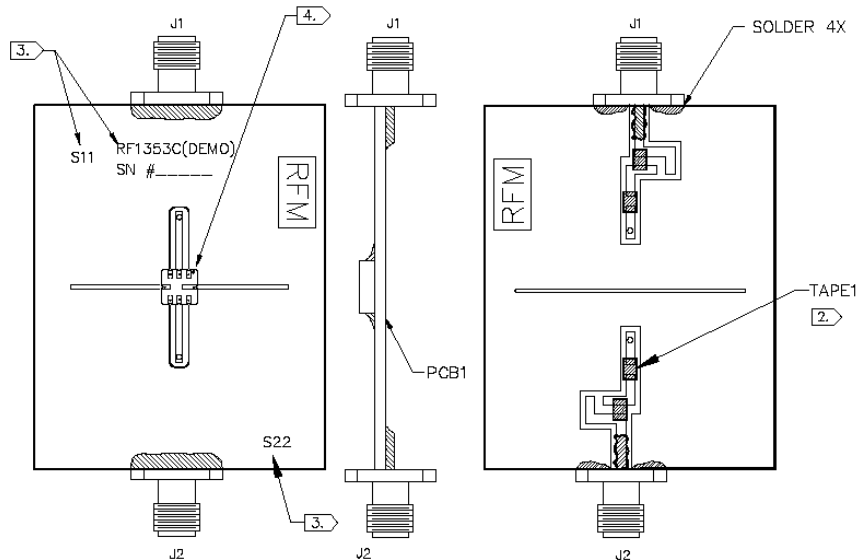


D.U.T.
(TOP VIEW)

DRAWN BY/DATE: J.F.Christopherson 25sep02		TITLE: ASSEMBLY DIAGRAM, RF1353C_TD (DEMO)	
RF Monolithics, Inc. DALLAS, TEXAS 75244	<small>ALL INFORMATION DISCLOSED BY THIS DOCUMENT IS CONFIDENTIAL AND PROPRIETARY TO RF MONOLITHICS, INC. ALL DESIGN, MANUFACTURE, USE, REPRODUCTION AND SALES RIGHTS ARE RESERVED BY RF MONOLITHICS, INC.</small>	SIZE A	CODE IDENT 2U874
		DWG. NO. RF1353C-000	REV A
			SHEET 1/2

NOTES:

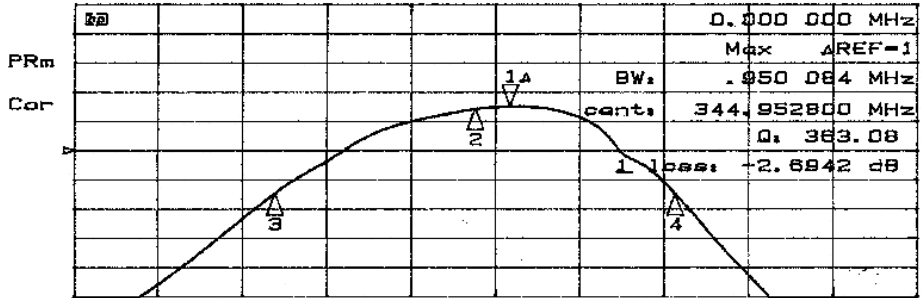
1. SOLDER MOUNT FLTR1 AND CONNECTORS TO PCB1
2. SOLDER TAPE1 FOUR PLACES AS SHOWN.
3. ATTACH LABELS AS SHOWN.
4. NOTE PROPER ORIENTATION OF SAW DEVICE.



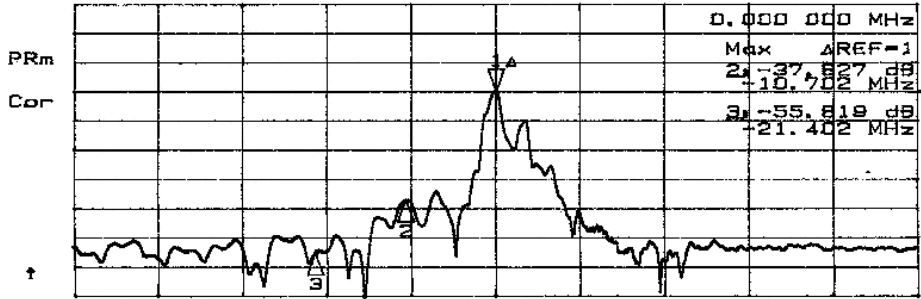
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			SHEET 2

RF1353C

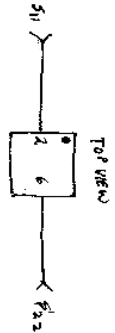
22 May 2002 13:01:48
 CH1 S₂₁ log MAG 1 dB/ REF -4.2 dB 1 0 dB



CH1 CENTER 345.000 000 MHz SPAN 2.000 000 MHz
 CH2 S₂₁ log MAG 10 dB/ REF -2.973 dB 1 0 dB

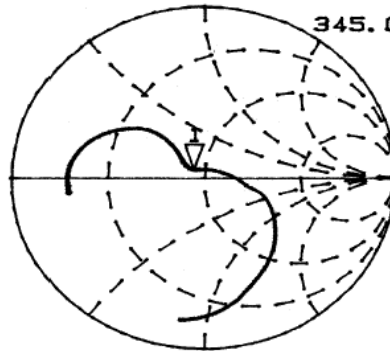


CH2 CENTER 345.000 000 MHz SPAN 100.000 000 MHz



22 May 2002 13:06:59
 CH1 S₁₁ 1 U FS 1 45.432 n 4.3457 n 2.0048 nH
 345.000 000 MHz

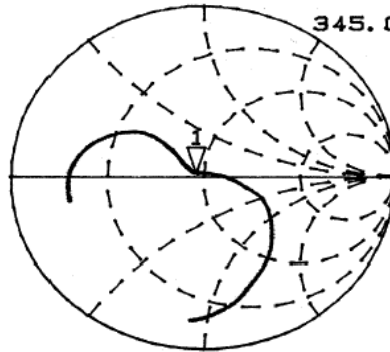
PRm
 Cor



↑

CH2 S₂₂ 1 U FS 1 46.686 n 2.0625 n 951.47 pH
 345.000 000 MHz

PRm
 Cor



↑

CENTER 345.000 000 MHz SPAN 2.000 000 MHz