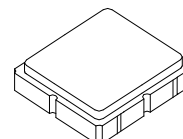


**RF1353D**

- **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****SM3838-6 Case****Absolute Maximum Ratings**

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

Electrical Characteristics

Characteristic	Sym	Notes	Minimum	Typical	Maximum	Units
Nominal Operating Frequency	f_c			345		MHz
Passband Insertion Loss	IL				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	SM3838-6					
Lid Symbolization (YY=Year, WW=week, S=shift)	RFM, 444, YYWWS					

Electrical Connections

Connection	Terminals
RF Input	2
RFOutput	6
Case Ground	All Others

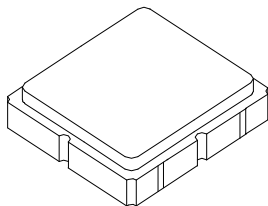
**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.****Notes:**

- 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.

SM3838-6 Case

6-Terminal Ceramic Surface-Mount Case

3.8 X 3.8 mm Nominal Footprint



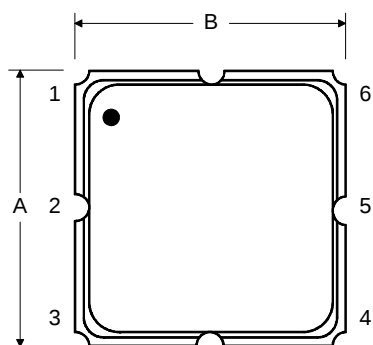
Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A		3.8			0.15	
B		3.8			0.15	
C		1.25			0.05	
D		1.0			0.04	
E		3.6			0.14	
G		1.0			0.04	
H		2.0			0.08	
I		0.6			0.02	
J		1.8			0.07	

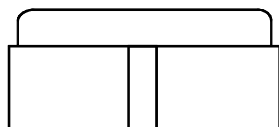
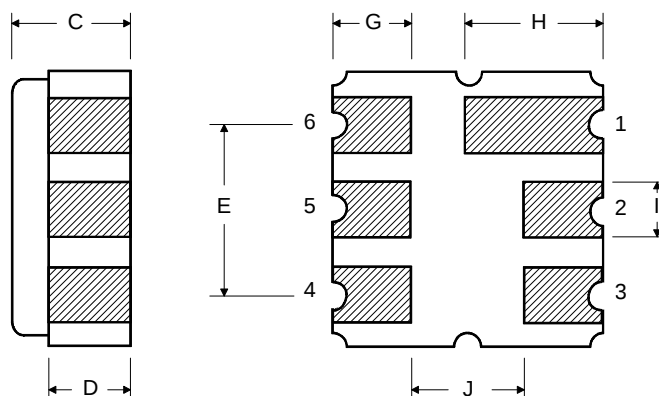
Electrical Connections

Connection		Terminals
Port 1	Single Ended Input	2
Port 2	Single Ended Output	5
	Ground	All others
Single Ended Operation Only		
Dot indicates Pin 1		

TOP VIEW

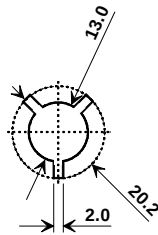


BOTTOM VIEW

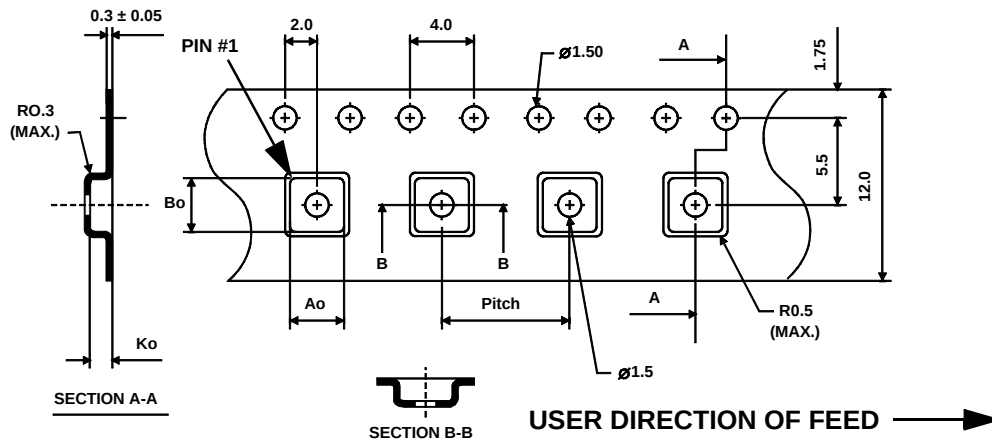


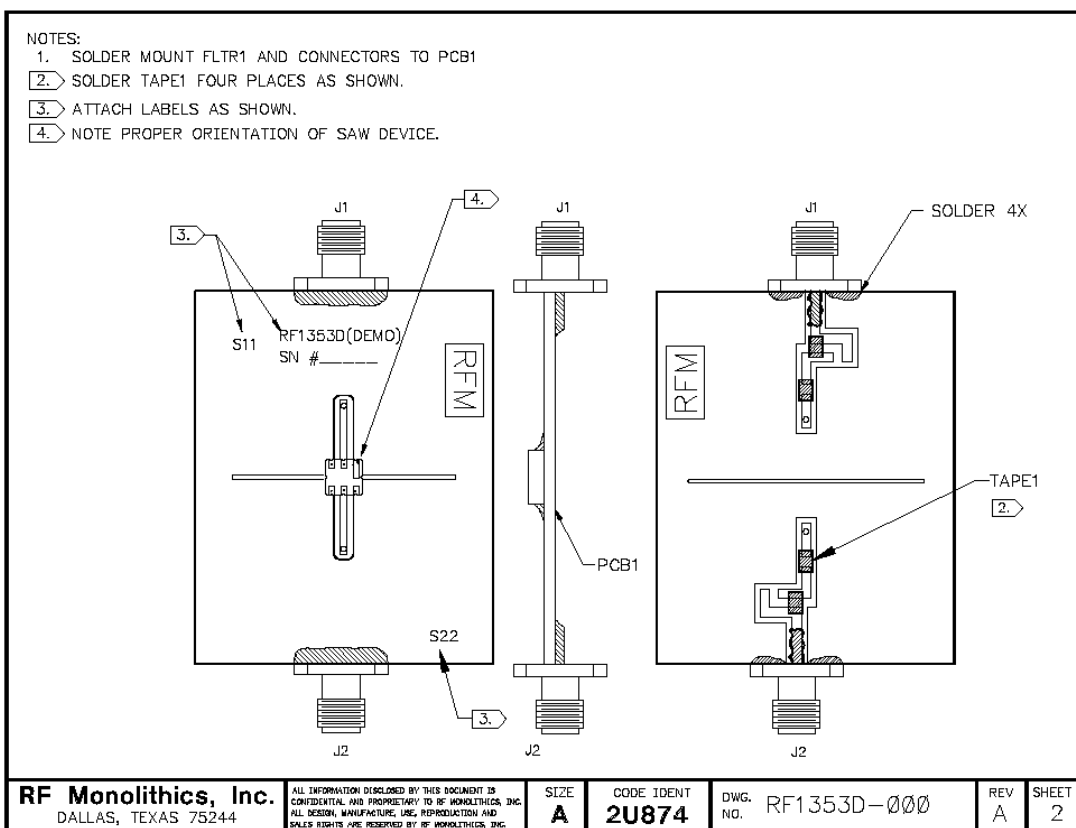
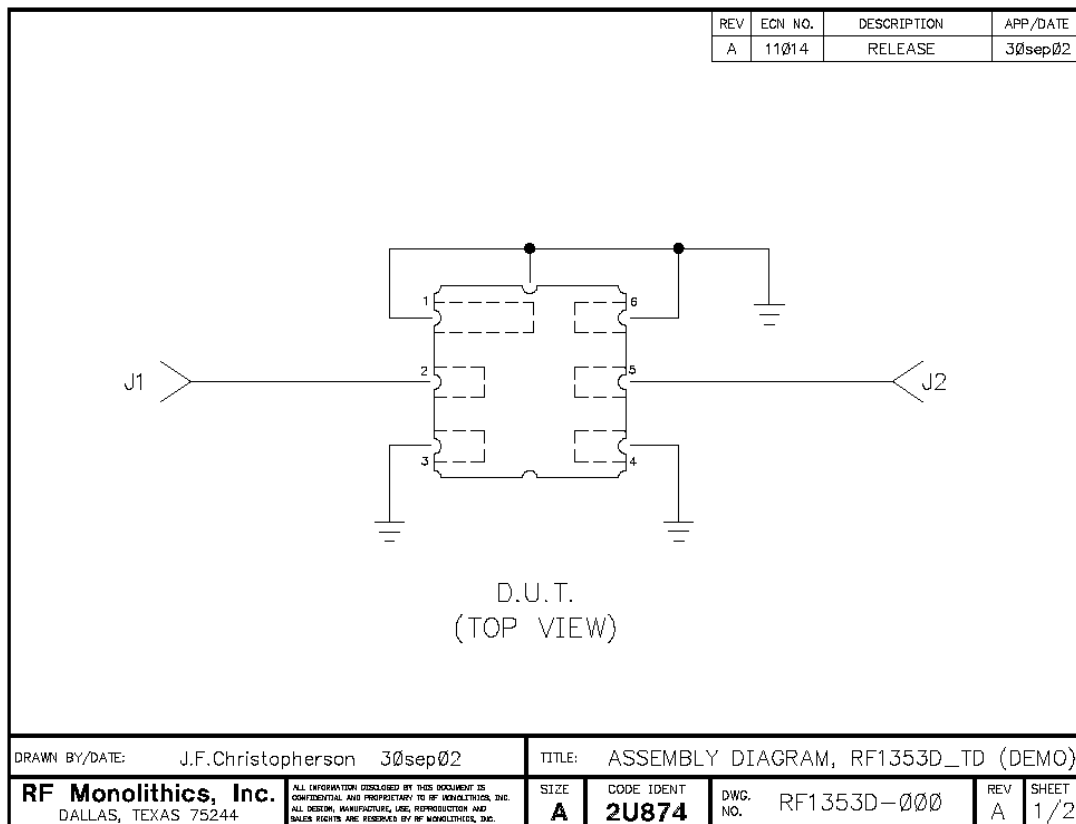
Technical drawing of a circular object, likely a cross-section of a pipe or a similar component. The drawing includes a large outer circle and a smaller inner circle, both centered on a common point. A horizontal dashed line and a vertical dashed line intersect at the center. A small circle with a cross inside is located at the center of the inner circle. A leader line points from the text "tail 'A'" to this central feature. To the right of the main drawing, there are two vertical dimension lines. The first dimension line is labeled "100 REF." and the second dimension line is labeled "'B" REF.". Below these, there is a horizontal dimension line labeled "12.0".

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

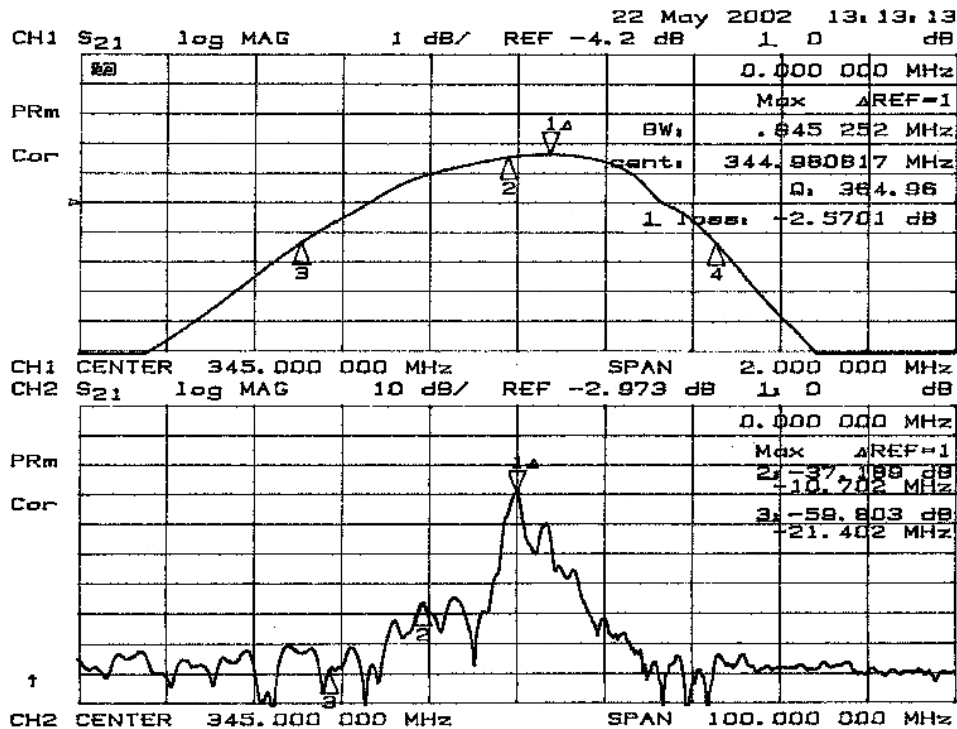


Carrier Tape Dimensions	
Ao	4.25 mm
Bo	4.25 mm
Ko	1.30 mm
Pitch	8.0 mm
W	12.0 mm





RF1353D



22 May 2002 13:10:14

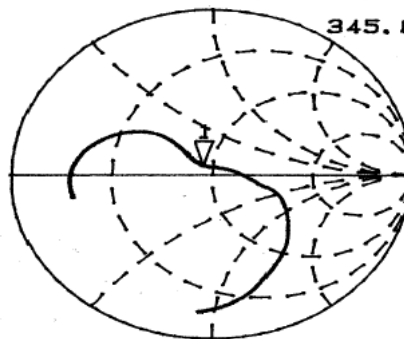
CH1 S₁₁ 1 U FS 1 46.676 n 4.9043 n 2.2624 nH

345.000 000 MHz

PRm

Cor

↑



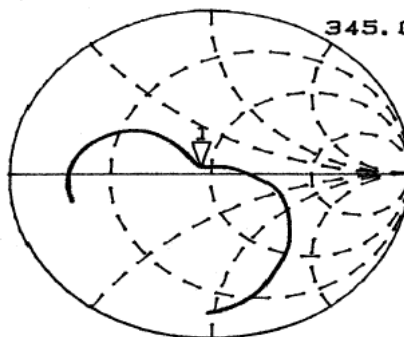
CH2 S₂₂ 1 U FS 1 46.029 n 3.8633 n 1.7822 nH

345.000 000 MHz

PRm

Cor

↑



CENTER 345.000 000 MHz SPAN 2.000 000 MHz