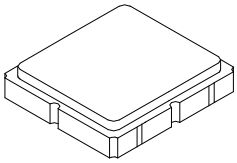
RF1353D

345.00 MHz SAW Filter

- ***Designed for 345 MHz Low-power Wireless Applications***
- ***Advanced $LiTaO_3$ Design for Low Insertion Loss***
- ***Direct Match to 50 ohms***
- ***Hermetically-sealed Surface Mount package***
- ***Complies with Directive 2002/95/EC (RoHS)***



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±70	f_C±430	f_C±1100	kHz
Rejection:						dB
f_C-10.7 MHz			15			
f_C-21.4 MHz			40			
Direct Input/Output Match:				50		Ω
Operating Temperature Range			-10		70	°C
Case			SM3838-6, 3.8 x 3.8 mm Footprint			
Lid Symbolization (YY=Year, WW=week, S=shift)			RFM/444/YYWWS			

Electrical Connections

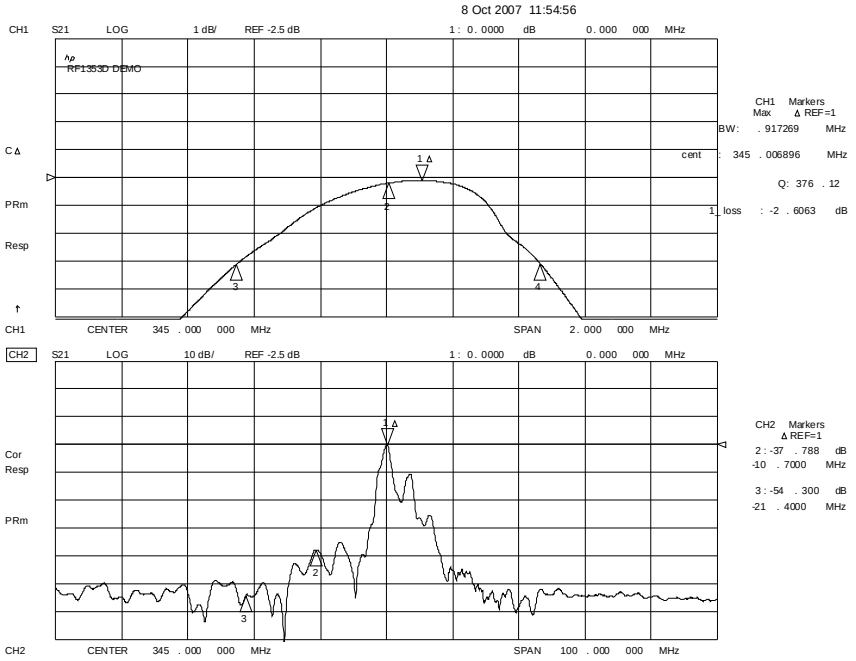
Connection	Terminals
RF Input	2
RFOutput	5
Case Ground	All Others

CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

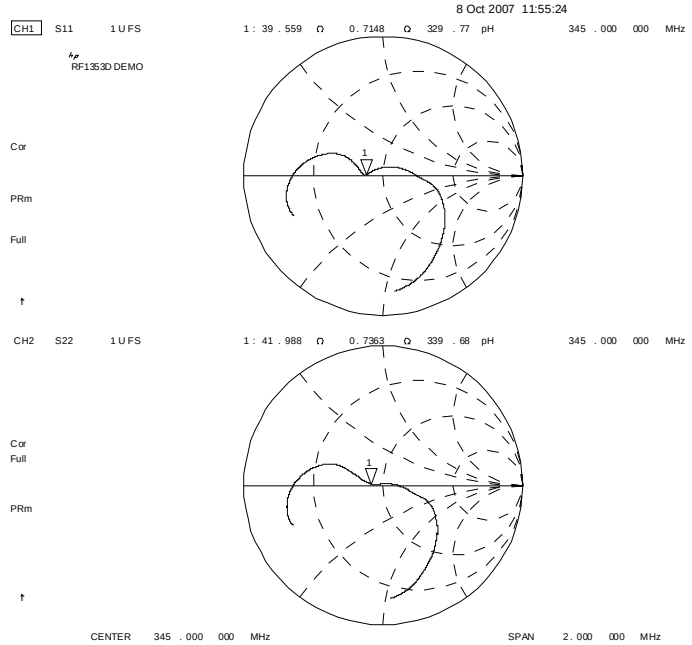
Notes:

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.

Filter Amplitude Response

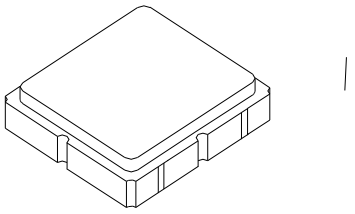


Filter Input/Output Impedance Plots



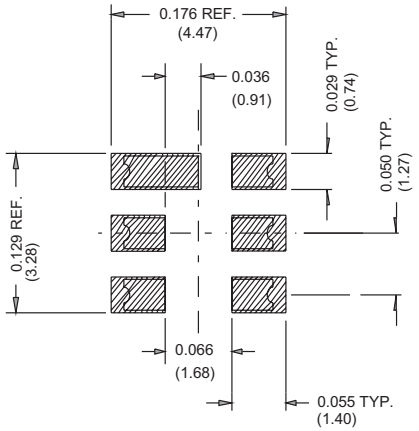
SM3838-6 Case

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	3.60	3.80	4.00	0.142	0.150	0.157
B	3.60	3.80	4.00	0.142	0.150	0.157
C	1.10	1.30	1.50	0.043	0.050	0.060
D	0.95	1.10	1.25	0.037	0.043	0.049
E	2.39	2.54	2.69	0.094	0.100	0.106
G	0.90	1.00	1.10	0.035	0.040	0.043
H	1.90	2.00	2.10	0.748	0.079	0.083
I	0.50	0.60	0.70	0.020	0.024	0.028
J	1.70	1.80	1.90	0.067	0.071	0.075

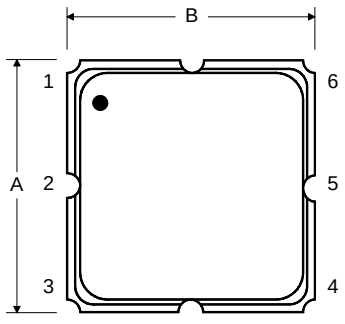


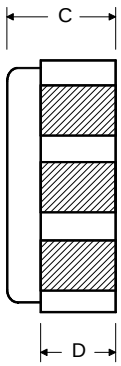
PCB Footprint

Case Material

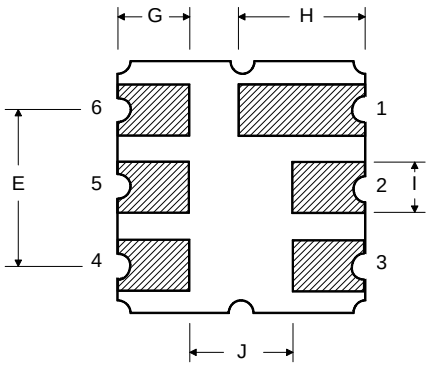
Materials	
Solder Pad Plating	0.3 to 1.0 µm Gold over 1.27 to 8.89 µm Nickel
Lid Plating	2.0 to 3.0 µm Nickel
Body	Al_2O_3 Ceramic
Pb Free	

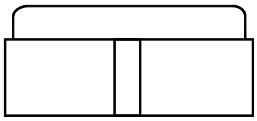
TOP VIEW



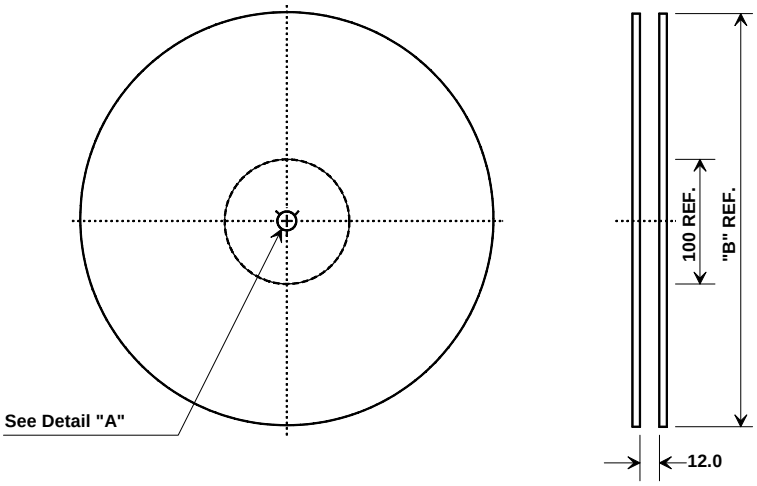


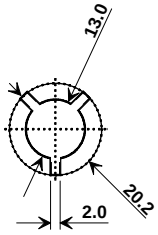
BOTTOM VIEW





Tape and Reel Specifications

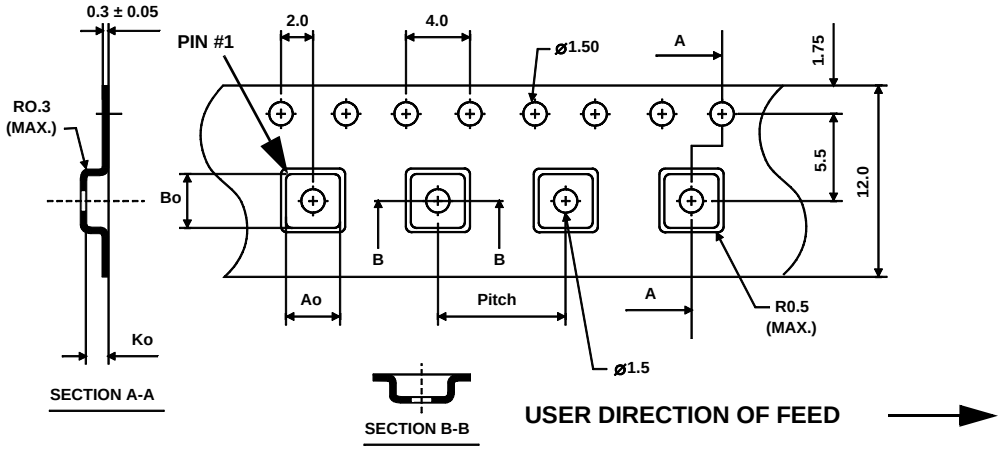




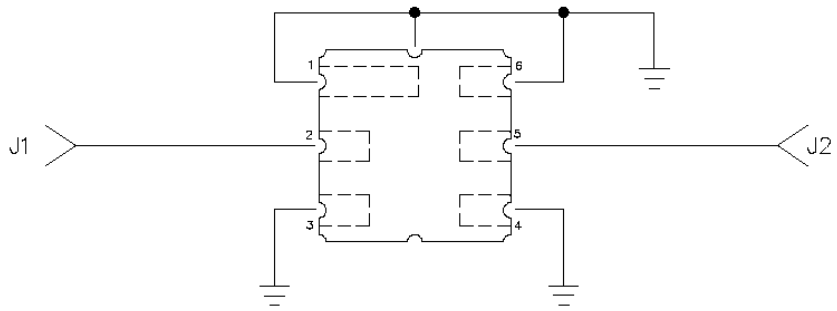
"B " Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	1000
13	330	3000

COMPONENT ORIENTATION and DIMENSIONS

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



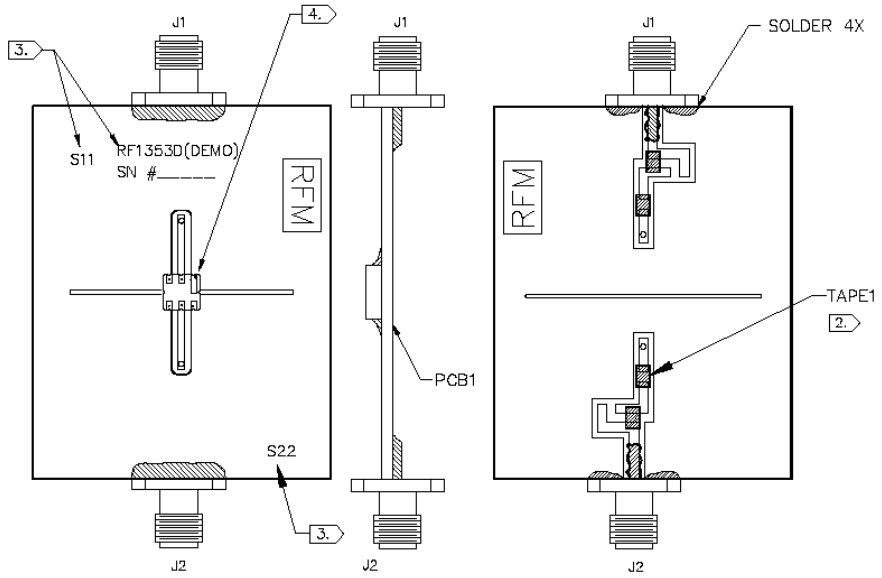
REV	ECN NO.	DESCRIPTION	APP/DATE
A	11Ø14	RELEASE	3ØsepØ2



D.U.T.
(TOP VIEW)

DRAWN BY/DATE: J.F.Christopherson 3ØsepØ2		TITLE: ASSEMBLY DIAGRAM, RF1353D_TD (DEMO)				
RF Monolithics, Inc. DALLAS, TEXAS 75244		SIZE **A**	CODE IDENT **2U874**	DWG. NO. RF1353D-ØØØ	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.



RF Monolithics, Inc. DALLAS, TEXAS 75244		SIZE **A**	CODE IDENT **2U874**	DWG. NO. RF1353D-ØØØ	REV A	SHEET 2