# **Preliminary**



• RF Filter Designed for Front End GPS Applications

- Excellent Rejection
- 1.45 x 1.15 mm Surface-Mount Case
- Complies with Directive 2002/95/EC (RoHS)

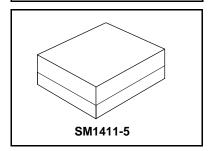


**Absolute Maximum Ratings** 

Abbolate maximum ratings					
Rating	Value Units				
Maximum Incident Power in Passband	+10	dBm			
aximum DC Voltage On any Non-ground Terminal 3 VD0					
Operating Temperature Range	-40 to +85	°C			
Storage Temperature Range in Tape and Reel	-40 to +85	°C			
Maximum Soldering Temerature Profile (5 cycles maximum)	265 °C for 10 s				



## 1575.42 MHz **SAW Filter**



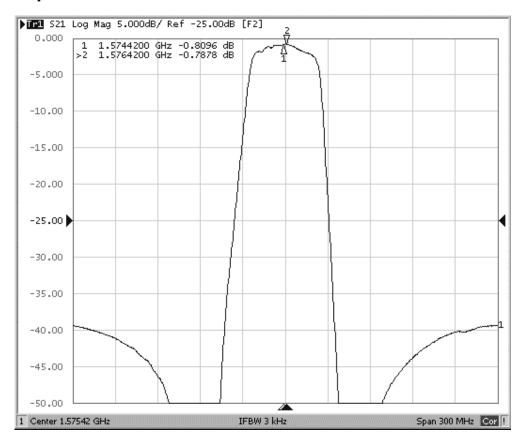
#### **Electrical Characteristics**

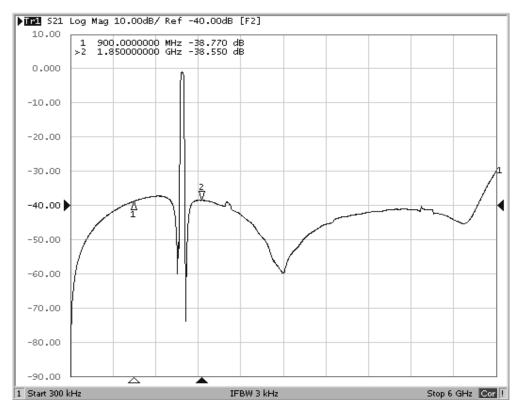
Characteristic	Sym	Notes	Min	Тур	Max	Units
Center Frequency	f <sub>C</sub>			1575.42	•	MHz
2 dB Bandwidth				40		MHz
Insertion Loss, 1574.42 to 1576.42 MHz	IL <sub>MAX</sub>			0.9	1.5	dB
Amplitude Ripple, 1574.42 to 1576.42 MHz				0.1	0.75	dB <sub>P-P</sub>
Rejection Referenced to IL <sub>MAX</sub>						
DC to 1450 MHz			35	38		dB
1450 to 1520 MHz			30	45		
1625 to 1640 MHz			45	48		
1640 to 1805 MHz			38	40		
1805 to 1910 MHz			38	40		
1910 to 2000 MHz			38	43		
2000 to 4000 MHz			30	45		
4000 to 6000 MHz			20	22		
VSWR, 1574.42 to 1576.42 MHz				1.15	1.6	
Terminating Source impedance	Z <sub>S</sub>			50		Ω
Terminating Load impedance	Z <sub>L</sub>			50		Ω
Case Style		SM1411-5				
Lid Symbolization ( V = week character)		2V				

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

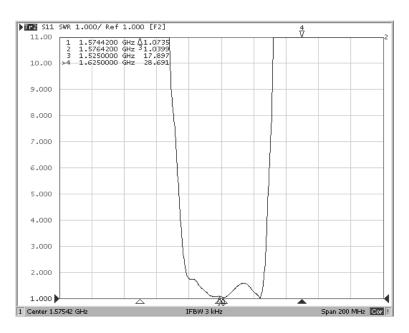
- US and international patents may apply. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.

#### **Frequency Response Plots**

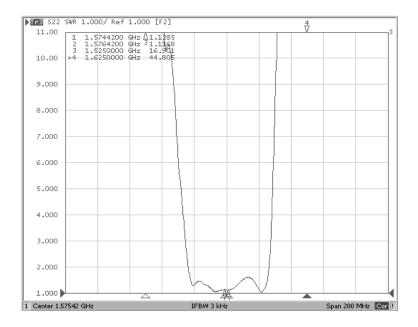




#### **Input VSWR Plot**



## **Output VSWR Plot**



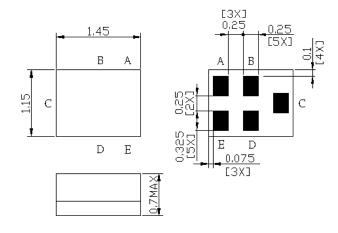
## **SM1411-5 Case**

## 5-Terminal Surface-Mount Case 1.45 X 1.15- mm Nominal Footprint

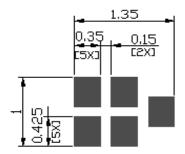
#### **Electrical Connections**

Connection	Terminals		
Input	С		
Output	A		
Ground	B, D, E		

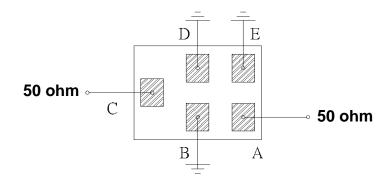
#### **Package Dimensions**



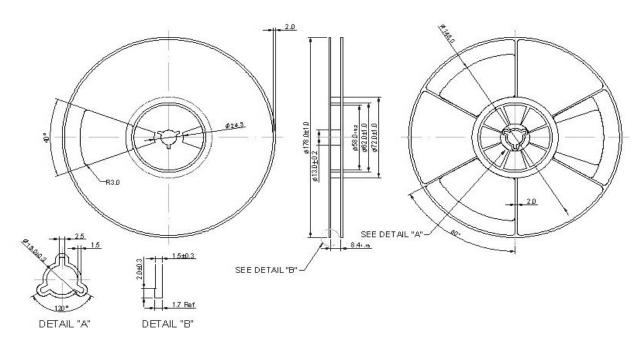
#### **Circuit Board Footprint**



#### **Test Circuit**



#### Reel Dimensions - 7 inch Reel, 3000 Filters



## **Tape Dimensions**

