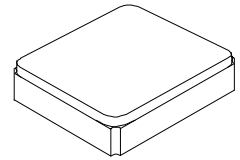


SF2463H

**1582.4 MHz
SAW Filter**



SM2016-4

- **Designed for Front End GPS, Beidou, and Glonass Applications**
- **Steep Rejection**
- **2.0 x 1.6 x 1.0 mm Surface-Mount Case**
- **No Matching Circuit Required**

Absolute Maximum Ratings

Rating	Value	Units
Maximum Input Power	+20	dBm
DC Voltage	0	VDC
Operable Temperature Range	-45 to +125	°C
Specification Temperature Range	-40 to +85	°C
Storage Temperature	-40 to +85	°C
Moisture Sensitivity Level	1	MSL
Maximum Soldering Profile (5 cycles maximum)	260 °C for 10 s	

Electrical Characteristics

Characteristic 25°C	Sym	NOTE	MIN	TYPICAL	MAX	Units
Center Frequency	fC			1582.4		MHz
Insertion Loss, 1559.05 to 1563.15 MHz	IL			1.3	2.0	dB
Insertion Loss, 1573.37 to 1577.47 MHz				1.0	2.0	
Insertion Loss, 1597.78 to 1605.66 MHz				1.0	2.2	
VSWR 1559.05 to 1563.15 MHz				1.6	2.1	
VSWR 1573.37 to 1577.47 MHz				1.6	2.1	
VSWR 1597.78 to 1605.66 MHz				1.6	2.1	
Variation of Group Delay (1597.78 to 1605.66)		1		5	14	ns
Attenuation Referenced to 0 dB:						
50 to 824 MHz			40	43		dB
824 to 925 MHz			39	43		
1427 to 1453 MHz			43	48		
1710 to 1785MHz			32	42		
1850 to 1910 MHz			35	40		
1920 to 1980 MHz			36	41		
2400 to 2500 MHz			36	41		
2500 to 2570 MHz			36	41		
2600 to 3000 MHz			30	35		
Source impedance	Z _S			50		Ω
Load impedance	Z _L			50		Ω
Temperature Coefficient				-36		ppm/°C
Standard Reel Quantity	Reel Size - 7 inch				2000 pieces/reel	
	Reel Size - 13 inch				10000 pieces/reel	

Single-ended Input / Output Impedance Match	No matching network required for operation at 50 ohms
Package Size	SM2016-4
Lid Symbolization (Y=year, W=week)	A5, YW



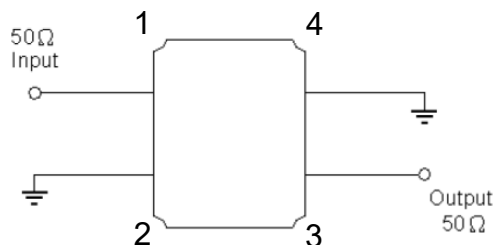
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

1. Averaged over 2 MHz
2. US and international patents may apply.
3. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.

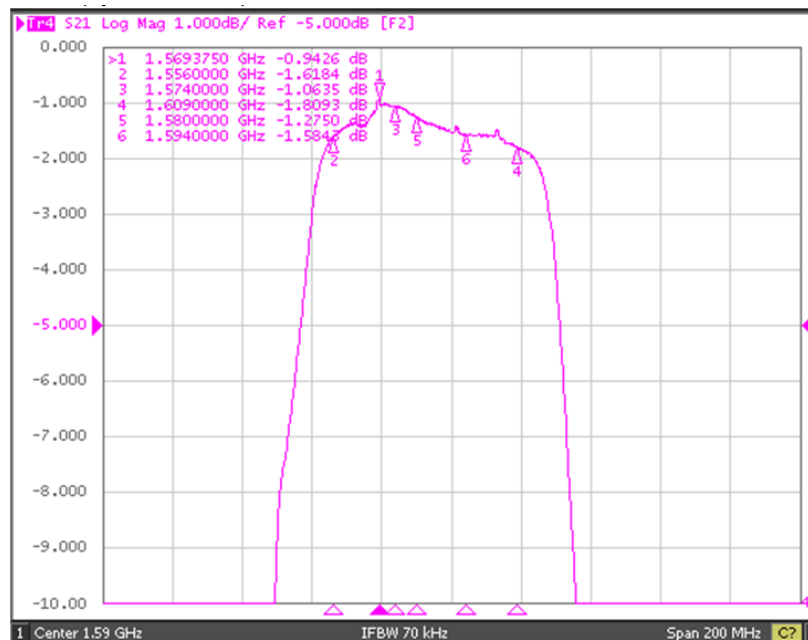
Electrical Connections

Connection	Terminals
Input	1
Output	3
Ground	All others

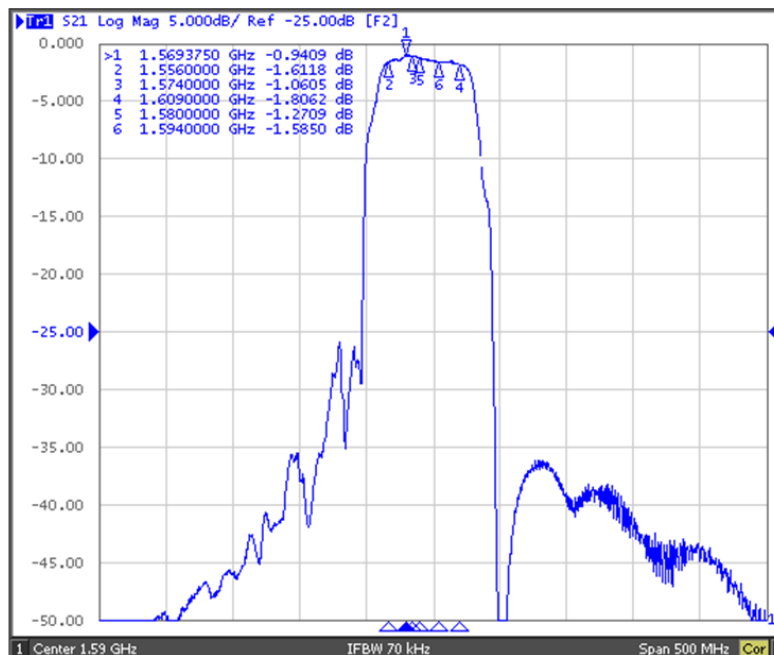


Frequency Characteristics

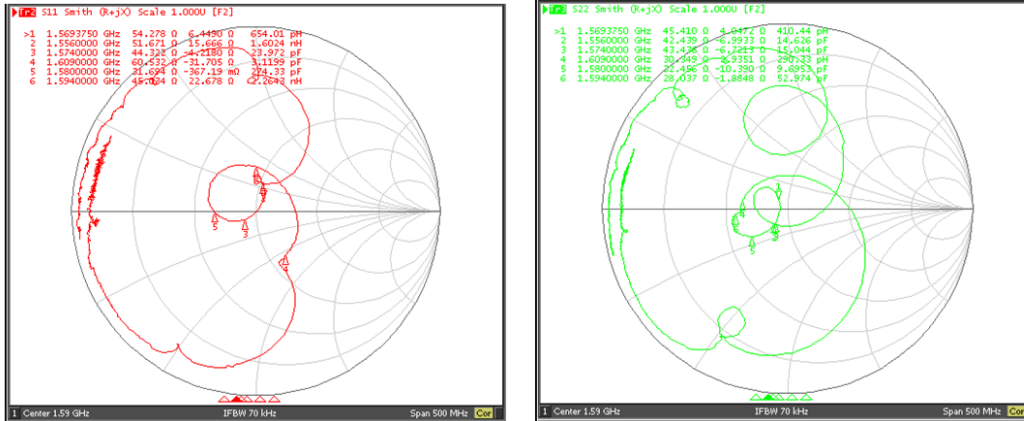
S21 Response: span 200 MHZ



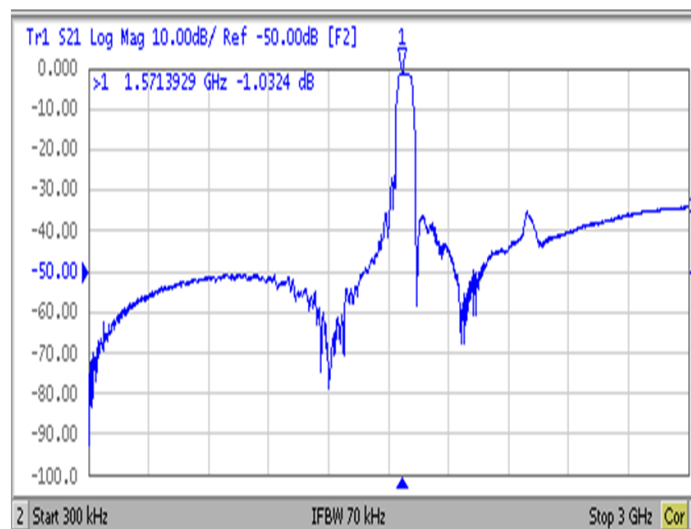
S21 Response: span 500 MHZ



S11/S22 Response



S21 Response: (span 3 GHz)



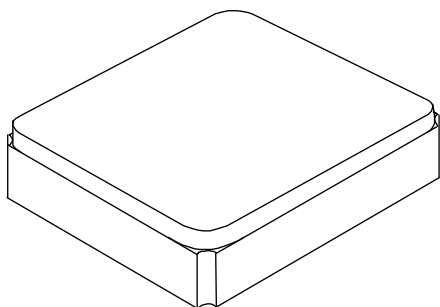
G-Delay Response: (Span 50 MHz)



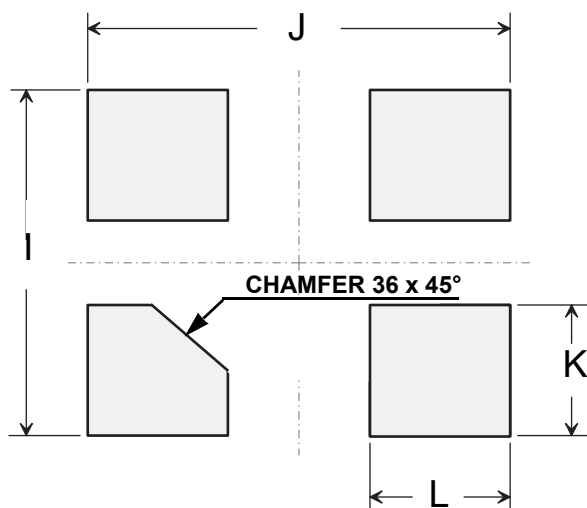
SM2016-4 Case

4-Terminal Ceramic Surface-Mount Case

2.0 X 1.6 mm Nominal Footprint



PCB PAD LAYOUT



Dimensions in mm

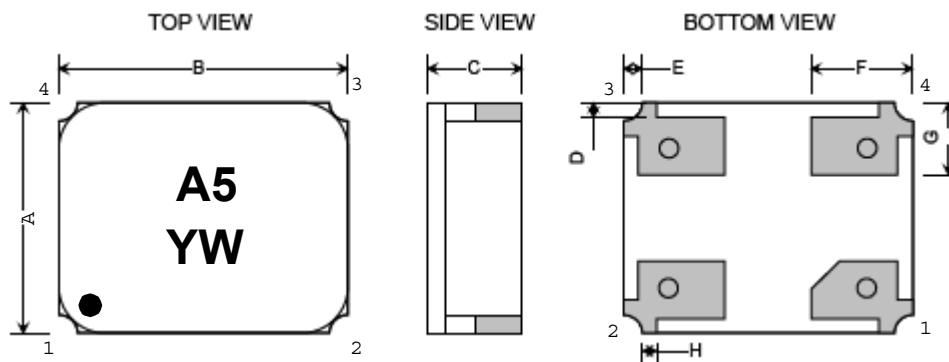
All pads have the same dimensions

Case Dimensions

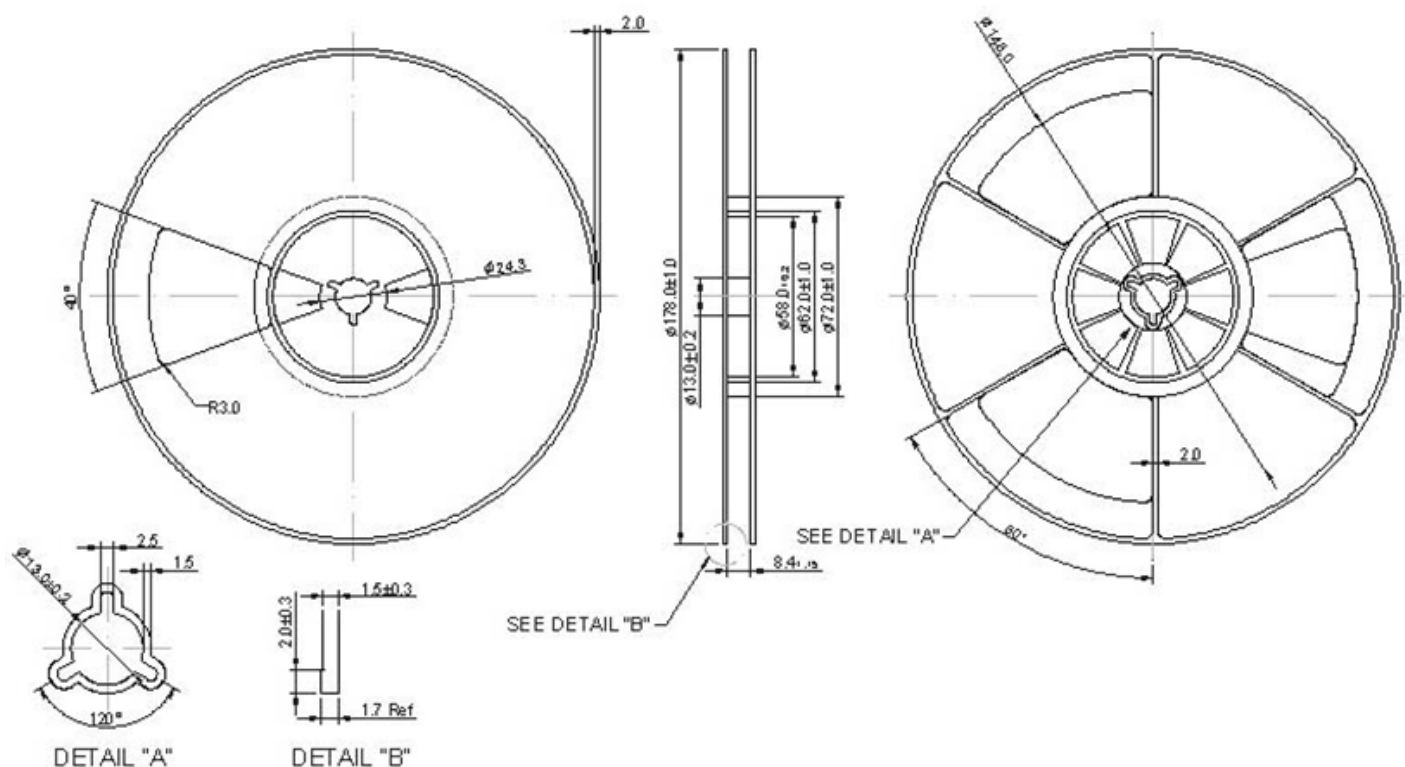
Dimension	mm		
	Min	Nom	Max
A	1.57	1.60	1.73
B	1.97	2.00	2.13
C	0.55	0.65	0.75
D		0.10	
E		0.10	
F		0.70	
G		0.50	
H		0.10	
I		1.80	
J		2.20	
K		0.60	
L		0.80	

Materials

Materials	
Solder Pad Plating	0.3 to 1.0 μ m Gold over 1.27 to 8.89 μ m Nickel
Lid Plating	2.0 to 3.0 μ m Nickel
Body	Al ₂ O ₃ Ceramic
Pb Free	



Reel Dimensions



Tape Dimensions

