

- *Designed for Front End GPS, and Glonass Applications*
- *Steep Rejection*
- *2.0 x 1.6 x 1.0 mm Surface-Mount Case*
- *No Matching Circuit Required*
- *RoHS Compliant*
- *Meets AEC-Q200 Standards*

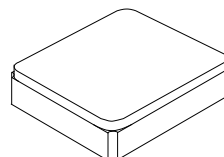


Absolute Maximum Ratings

Rating	Value	Units
Maximum Input Power	+20	dBm
DC Voltage	3	VDC
Operating Temperature	-40 to +105	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Storage Temperature Range without Tape and Reel	-40 to +105	°C
Maximum Soldering Profile (5 cycles maximum)	260 °C for 10 s	

SF2316H-1

**1588.655 MHz
SAW Filter**



SM2016-4

Electrical Characteristics

Characteristic 25°C	Sym	Notes	Min.	Typ	Max.	Units
Center Frequency	fC		1588.656			MHz
Insertion Loss, 1573.42 to 1577.42 MHz	IL			1.25	2.2	dB
Insertion Loss, 1571.42 to 1605.89 MHz				1.65	2.7	
Amplitude Ripple, 1573.42 to 1577.42 MHz				0.25	1.2	
Amplitude Ripple, 1571.42 to 1605.89 MHz				0.46	1.5	
I/O VSWR 1571.42 to 1605.89 MHz				1.85	2	
Attenuation Referenced to 0dB:						
0 to 915 MHz			30	36		dB
915 to 1452 MHz			28	36		
1452 to 1525 MHz			32	42		
1548.5 MHz			10	18		
1710 to 1850 MHz			28	40		
1850 to 6000 MHz			20	24		
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)	5K, YW



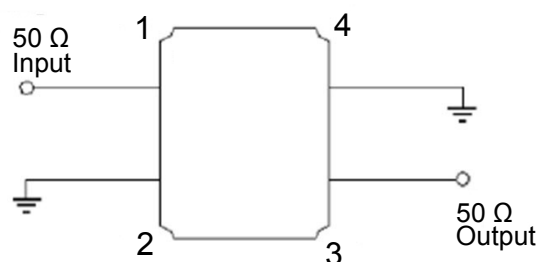
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

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

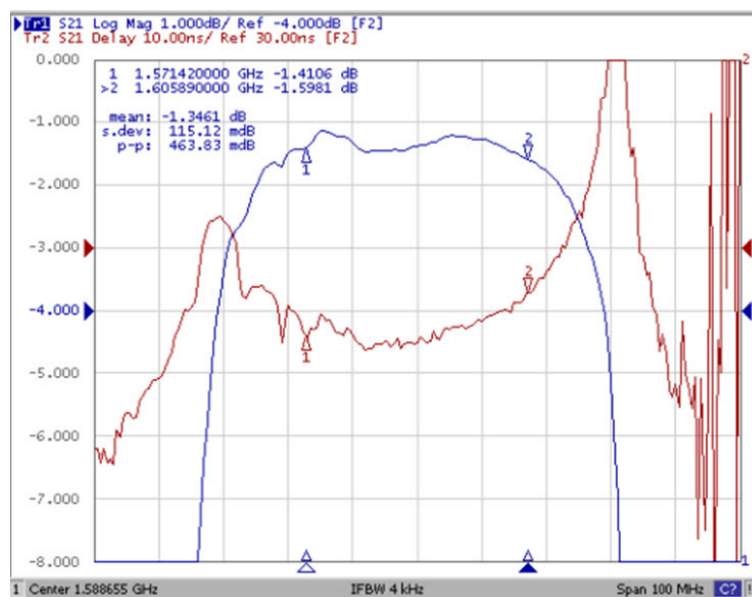
Electrical Connections

Connection	Terminals
Input	1
Output	3
Ground	All others

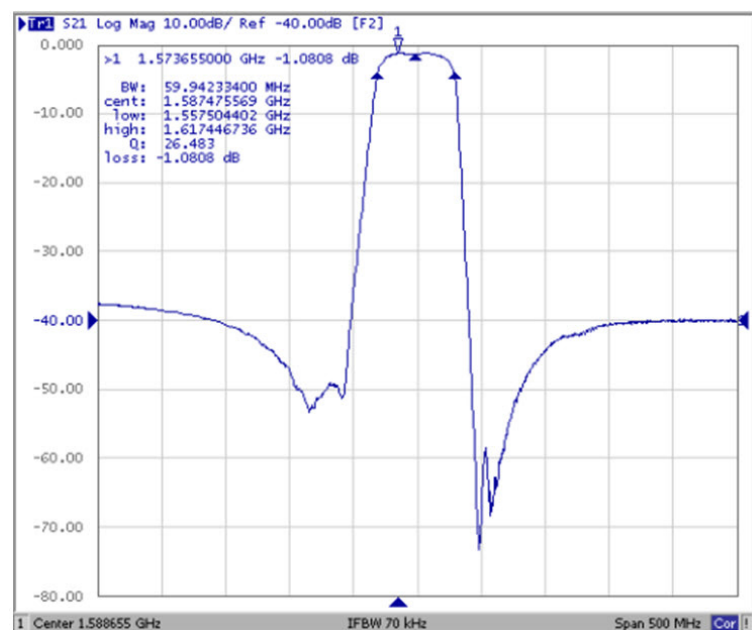


Frequency Characteristics

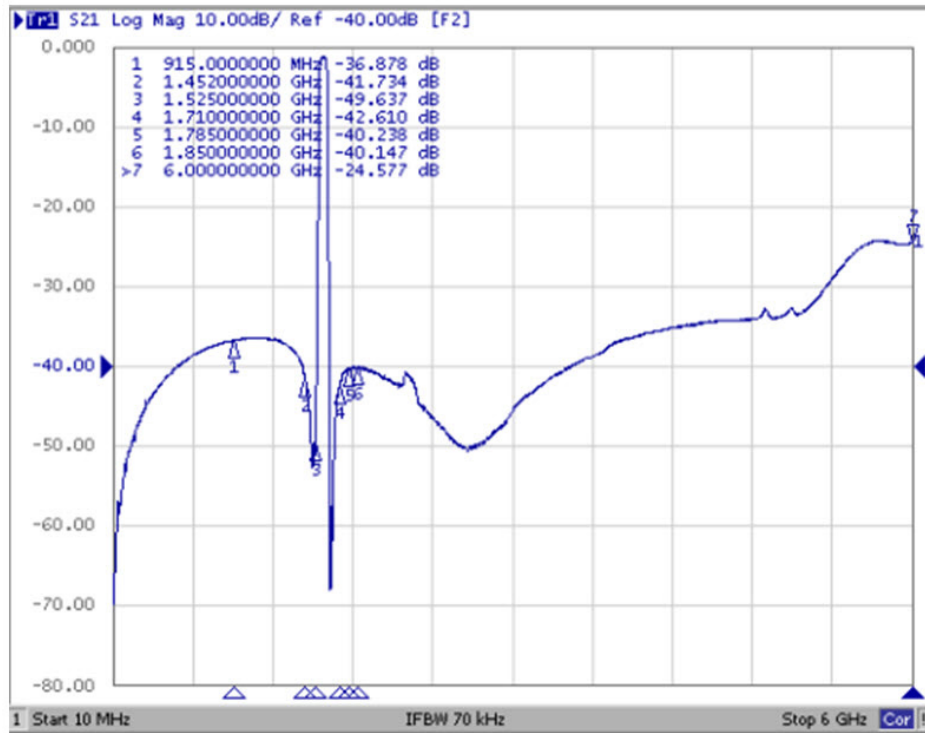
S21 Response: span 100 MHZ



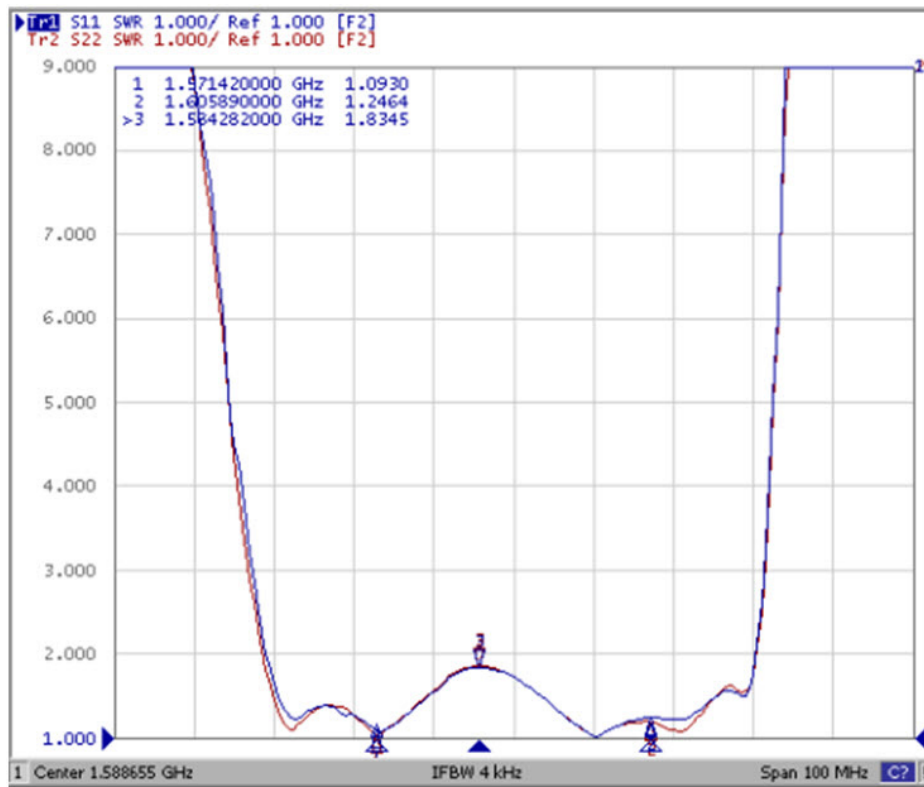
S21 Response: span 300 MHZ



S21 Response: span 6 GHz



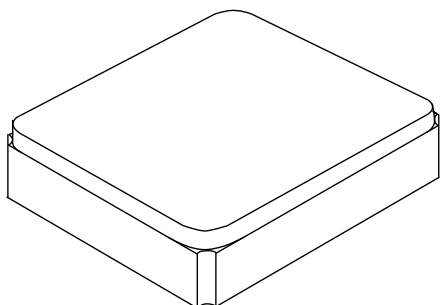
S11 & S22 VSWR - span 100 MHz



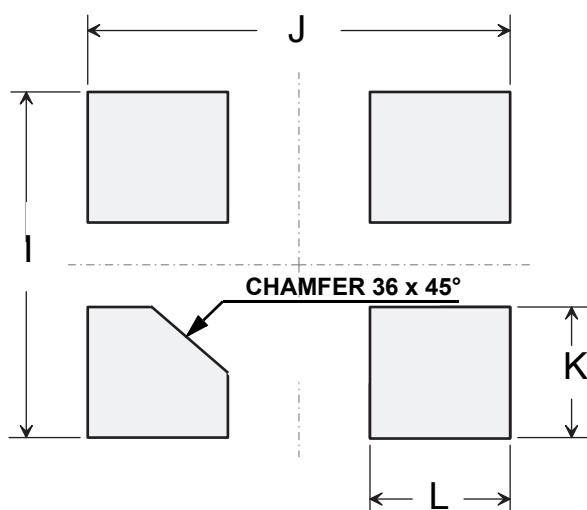
SM2016-4 Case

4-Terminal Ceramic Surface-Mount Case

2.0 X 1.6 mm Nominal Footprint



PCB PAD LAYOUT



Dimensions in mm

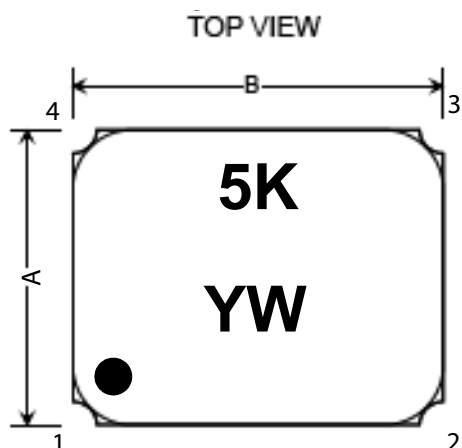
All pads have the same dimensions

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

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	



SIDE VIEW



BOTTOM VIEW

