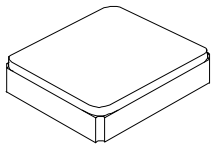
AEC-Q200

RoHS Compliance
This component is compliant with RoHS directive.
This component was always RoHS compliant from the first date of manufacture.

SF2460H

1254.15 MHz SAW Filter

- ***RF Filter Designed for Front End GPS Applications***
- ***Low Insertion Loss***
- ***Improved Rejection***
- ***2.0 x 1.6 mm Surface-Mount Case***



SM2016-4

Absolute Maximum Ratings

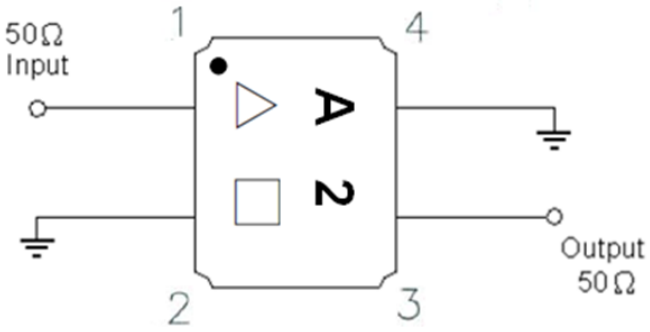
Rating	Value	Units
Input Power Level	+10	dBm
DC Voltage	3	VDC
Operable Temperature Range	-45 to +125	°C
Operating Temperature Range	-40 to +85	°C
Storage Temperature Range	-40 to +85	°C
Moisture Sensitivity Level	1	MSL
Maximum Soldering Profile	265°C for 10 s	

Electrical Characteristics

Characteristic		Sym	Notes	Min	Typ	Max	Units
Center Frequency		f_C			1254.15		MHz
Insertion Loss	1219.8 - 1288.5 MHz	IL_{MAX}			4.0	5.0	dB
Amplitude Ripple	1219.8 - 1288.5 MHz				1.1	2.0	
Group Delay Ripple	1219.8 - 1288.5 MHz				4	20	ns
Return Loss	1219.8 - 1288.5 MHz			6.5	7.5		dB
Attenuation (Reference to 0 dB)							dB
800 to 920 MHz				37	41		
1710 to 1780 MHz				39	43		
1850 to 1910 MHz				39	42		
1920 to 1980 MHz				40	44		
2400 to 2500 MHz				41	46		
Temperature Coefficient of Frequency		Z_L			-80		ppm/k

Single-ended Input / Output Impedance Match	No matching network required for operation at 50 ohms
Case Style	SM2016-4
Lid Symbolization (Y=year, W=week)	A2, YWWS

Connections	Terminal
Input	**1**
Output	**3**
Ground	**2, 4**

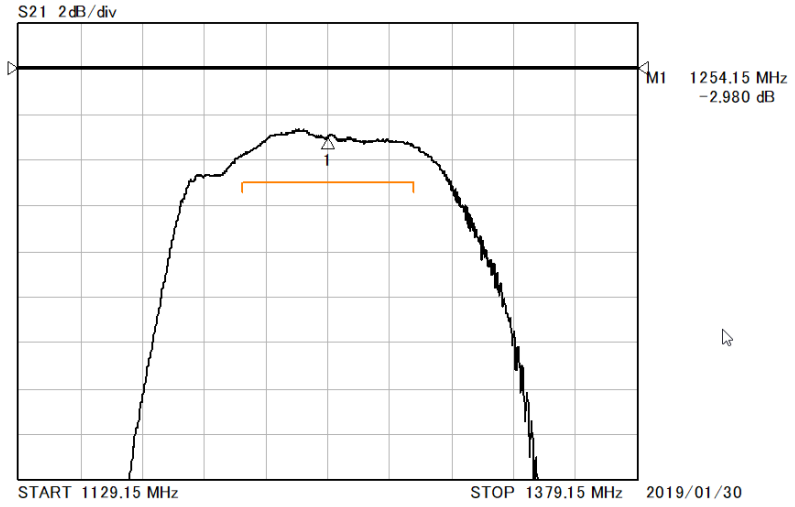


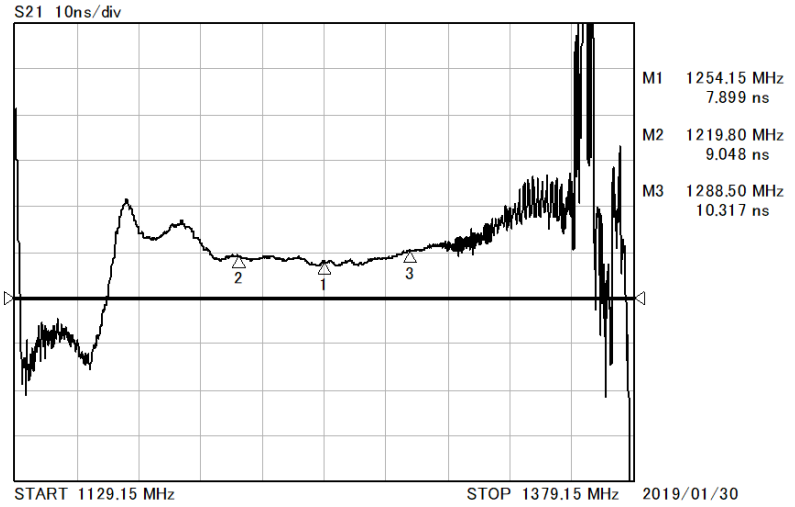
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

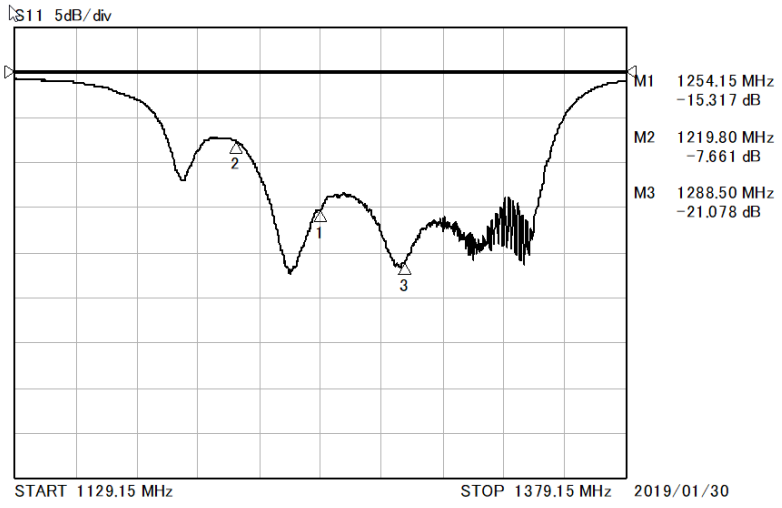
NOTES:

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.

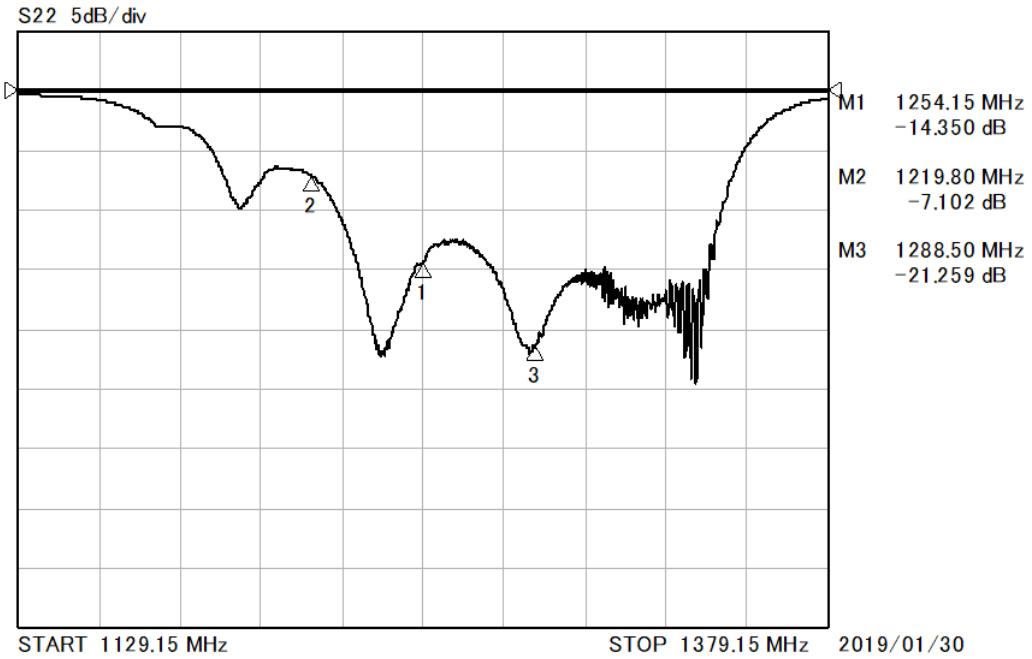
Frequency Characteristics

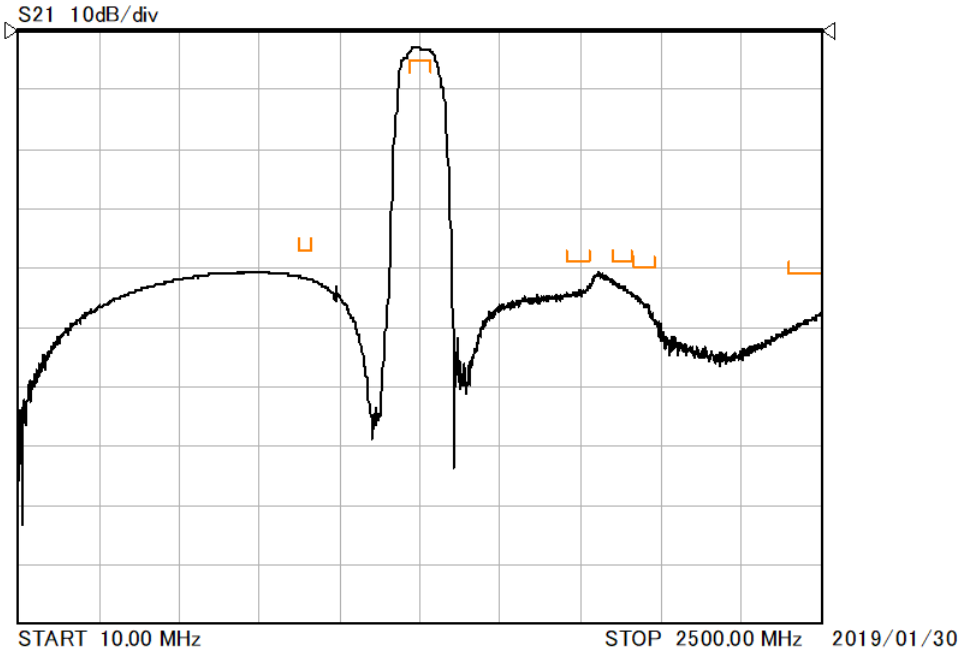






Reflection Functions

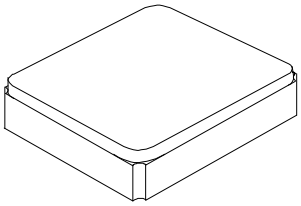




SM2016-4 Case

4-Terminal Ceramic Surface-Mount Case

2.0 X 1.6 mm Nominal Footprint

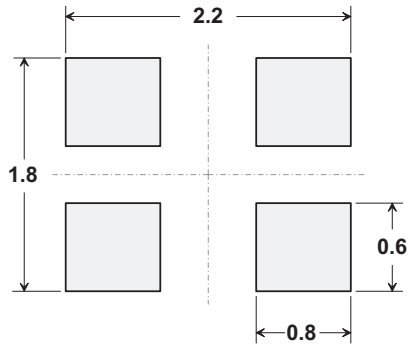


Electrical Connections

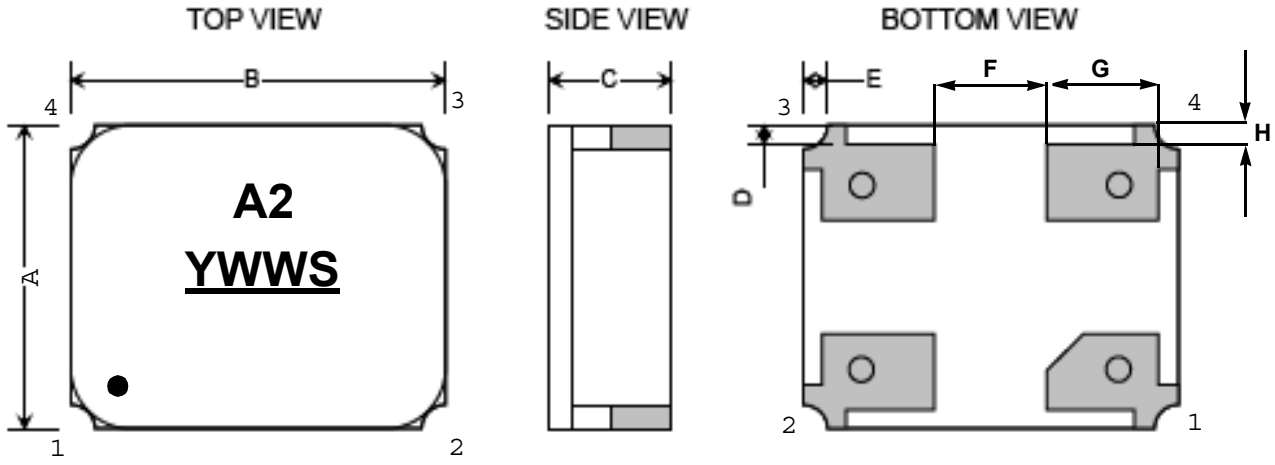
Connection	Terminals
Input	1
Output	3
Ground	2, 4

Dimensions	Millimeters			Inches		
	Min	Nom	Max	Min	Nom	Max
A	1.98	2.05	2.12	.077	0.080	.083
B	1.58	1.65	1.72	.062	0.064	.067
C	-	-	.090		0.035	
D	-	0.10	-		0.003	
E	-	0.10	-		0.003	
F	-	0.60	-		0.027	
G	-	0.625	-		0.019	
H	-	0.10	-		0.003	

PCB PAD LAYOUT



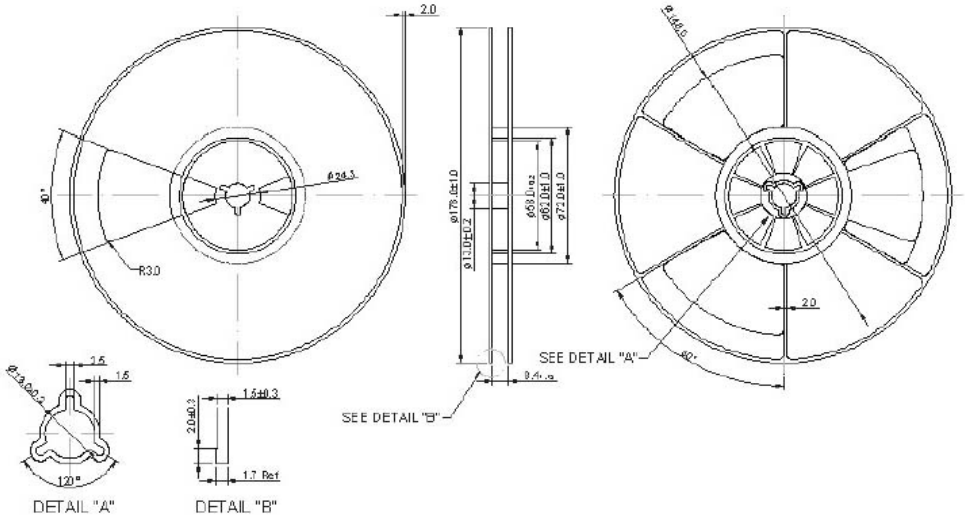
Dimensions in mm
All pads have the same dimensions



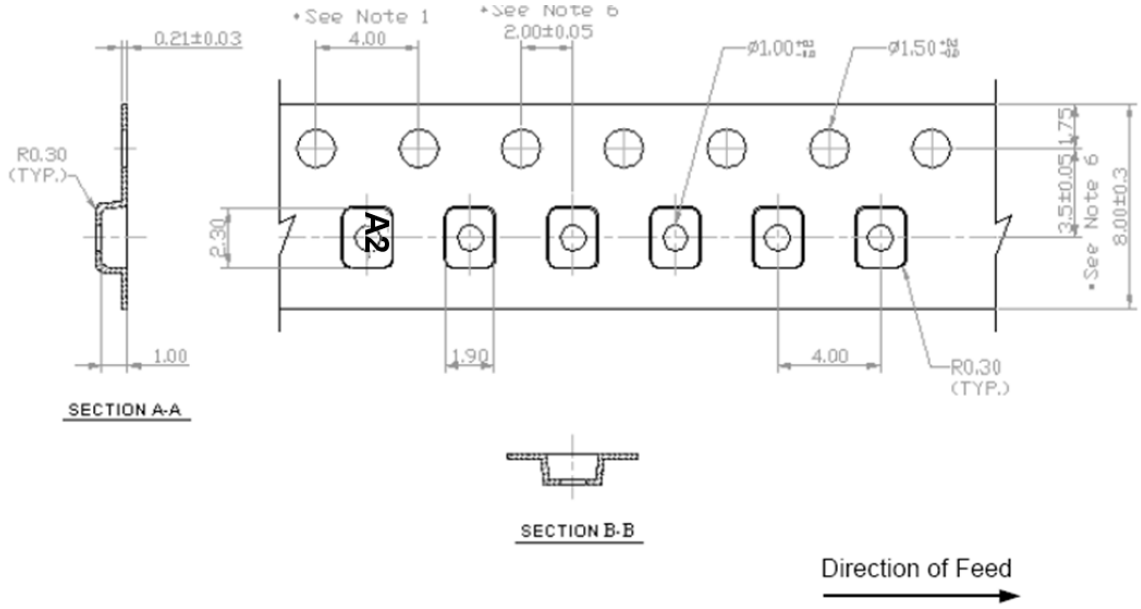
PACKING:

REEL DIMENSION

(Reel Count : 7"=2000 typ. ; 13"=10000 typ.)



TAPE DIMENSION



Recommended Reflow Profile:

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C+0/-5°C peak (20~40sec).
4. Time: 3 times.