

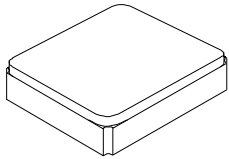
- **Designed for Front End GPS, Beidou, and Glonass Applications**
- **Steep Rejection**
- **2.0 x 1.6 x 1.0 mm Surface-Mount Case**
- **Complies with Directive 2002/95/EC (RoHS)**
- **Moisture Sensitivity Level: 1**
- **AEC-Q200 Qualified**

Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	+23	dBm
DC Voltage	5	VDC
Operable Temperature Range	-45 to +125	°C
Specification Temperature Range	-40 to +105	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C

SF2523H

1567.5 MHz
SAW Filter



SM2016-4

Electrical Characteristics

Characteristic	Sym	NOTE	-40 to +105°C			UNITS
			MIN	TYPICAL	MAX	
Center Frequency	Fc			1567.5		MHz
1 dB BW				28		MHz
Insertion Loss, 1550 MHz	IL1			4.8	7.0	dB
Insertion loss, 1555 MHz	IL2			3.2	3.7	
Attenuation Referenced to 0 dB:						dB
880 to 920 MHz			45	40		
920 to 1250 MHz			45	40		
1526 to 1536 MHz			40	54		
1626 to 1657 MHz			45	50		
1670 to 1680 MHz			45	54		
1710 to 1780 MHz			40	43		
1850 to 2500 MHz			30	40		
Temperature Coefficient of Frequency				-17		ppm/°C
Source impedance	Z _S			50		Ω
Load impedance	Z _L			50		Ω

Standard Reel Quantity	Reel Size: 7 inch	2000 Pieces/Reel
	Reel size: 13 inch	10,000 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)	Y, YW	



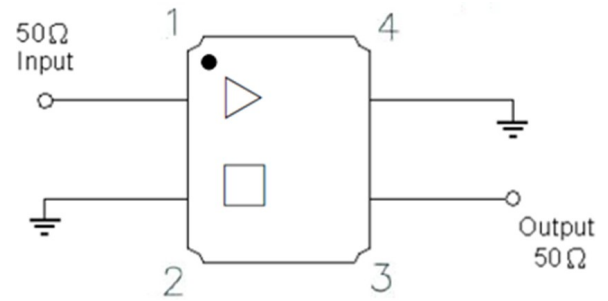
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

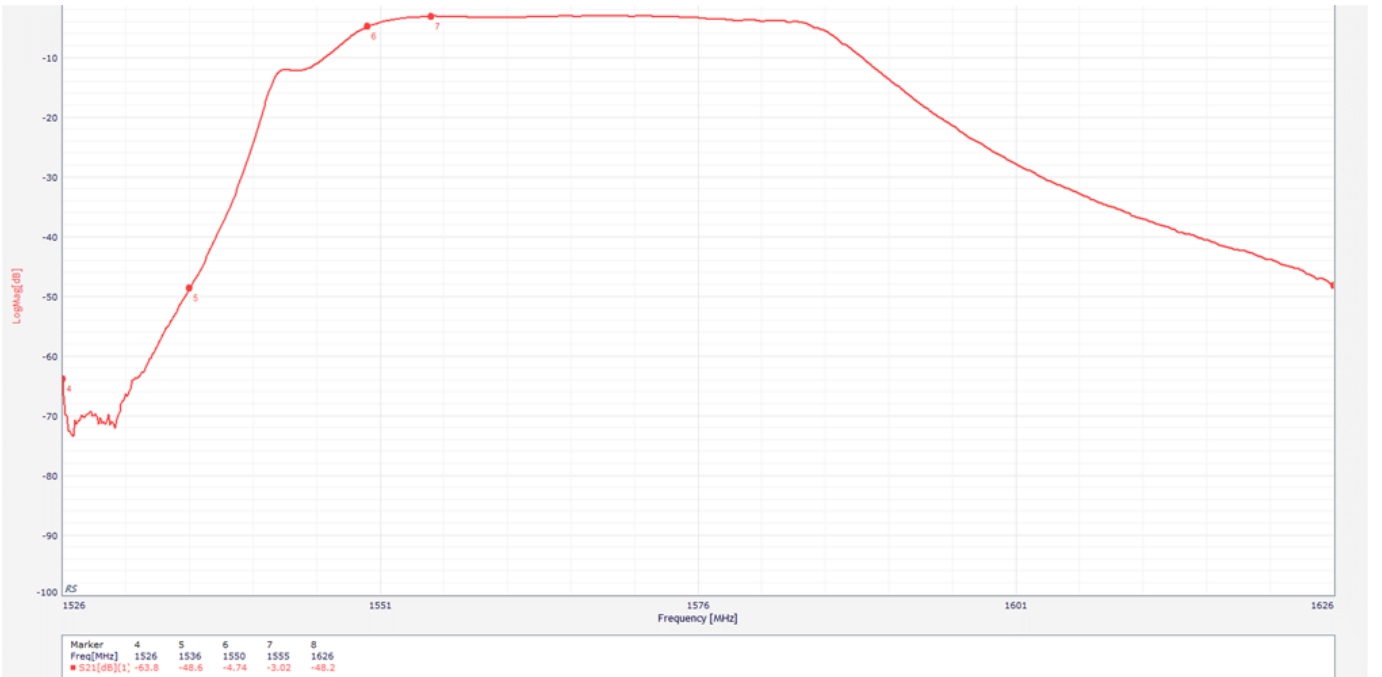
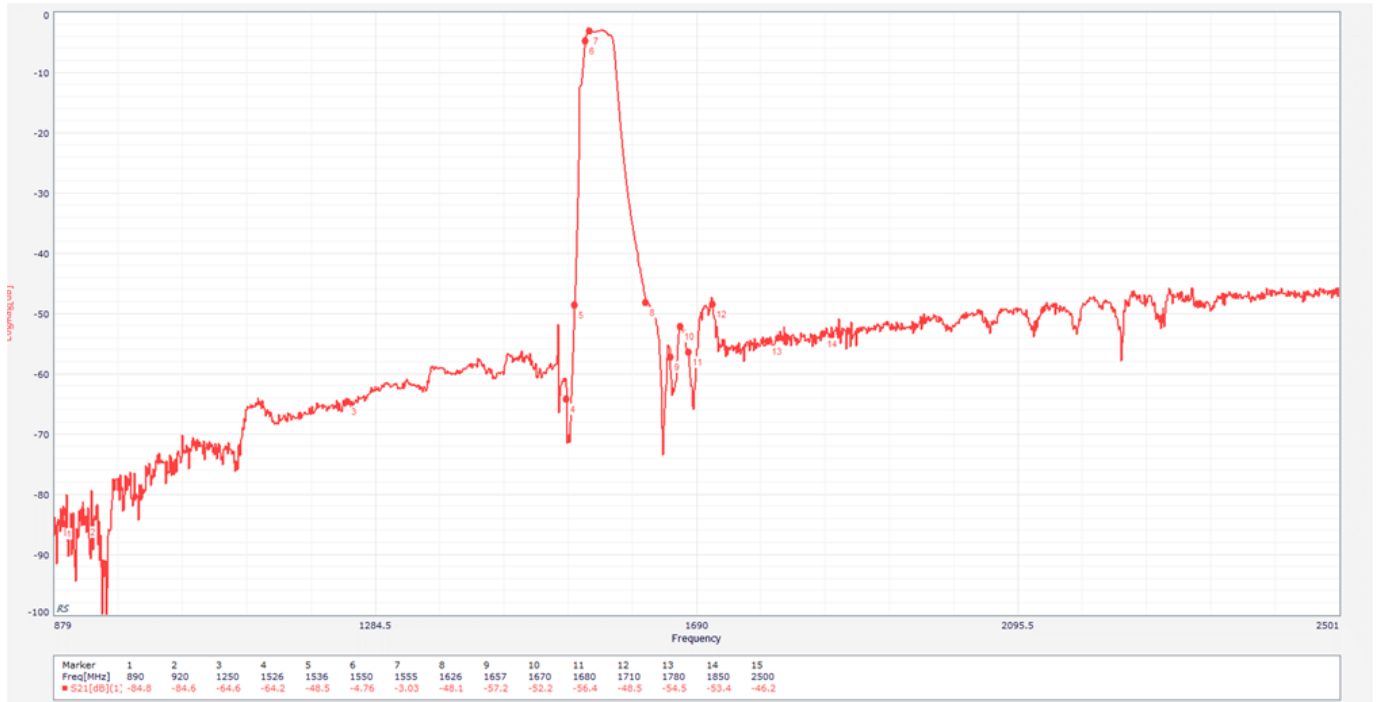
NOTES:

1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Electrical Connections

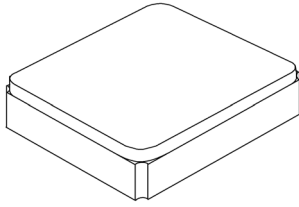
Connection	Terminals
Input	1
Output	3
Ground	All others





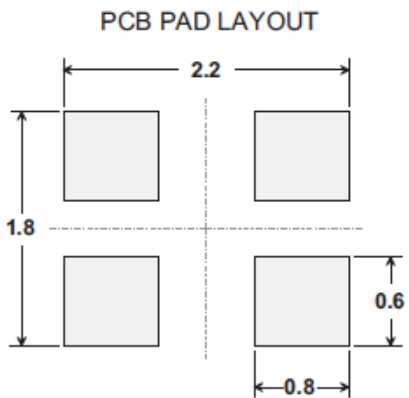
SM2016-4 Case

4-Terminal Ceramic Surface-Mount Case 2.0 X 1.6 mm Nominal Footprint



Electrical Connections

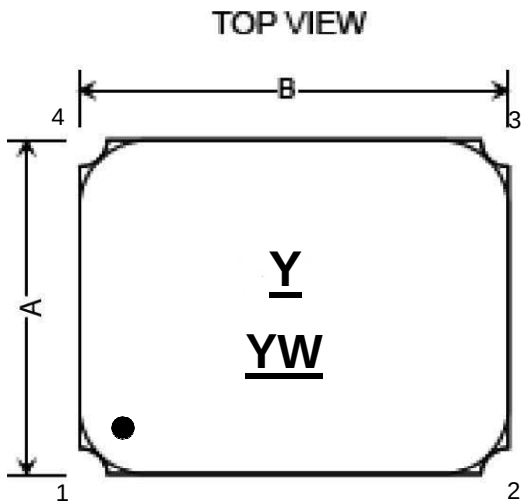
Connection	Terminals
Input	1
Output	3
Ground	2, 4



Dimensions in mm
All pads have the same dimensions

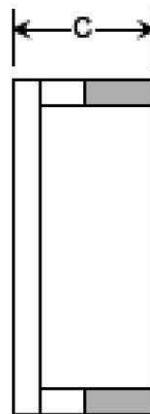
PCB Footprint Top View

Dimensions	Millimeters			Inches		
	Min	Nom	Max	Min	Nom	Max
A	1.58	1.65	1.72	0.062	0.064	0.067
B	1.98	2.05	2.12	0.077	0.080	0.083
C	-	-	0.9	-	0.035	0.035
D	-	0.60	-	-	0.023	-
E	-	0.425	-	-	0.016	-
F	-	0.60	-	-	0.023	-
G	-	0.625	-	-	0.024	-
H	-	0.10	-	-	0.003	-

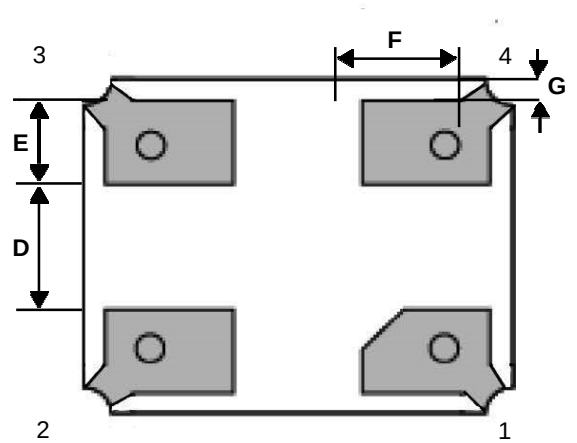


Line 2: Y = Year, W = Week

SIDE VIEW



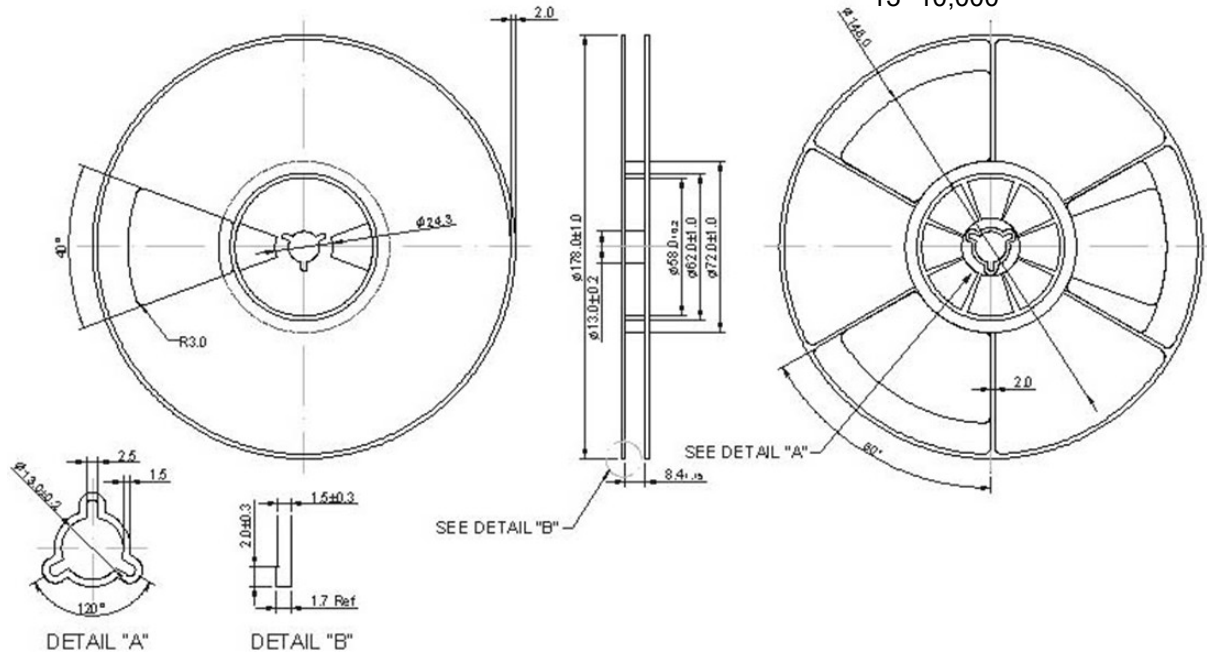
BOTTOM VIEW



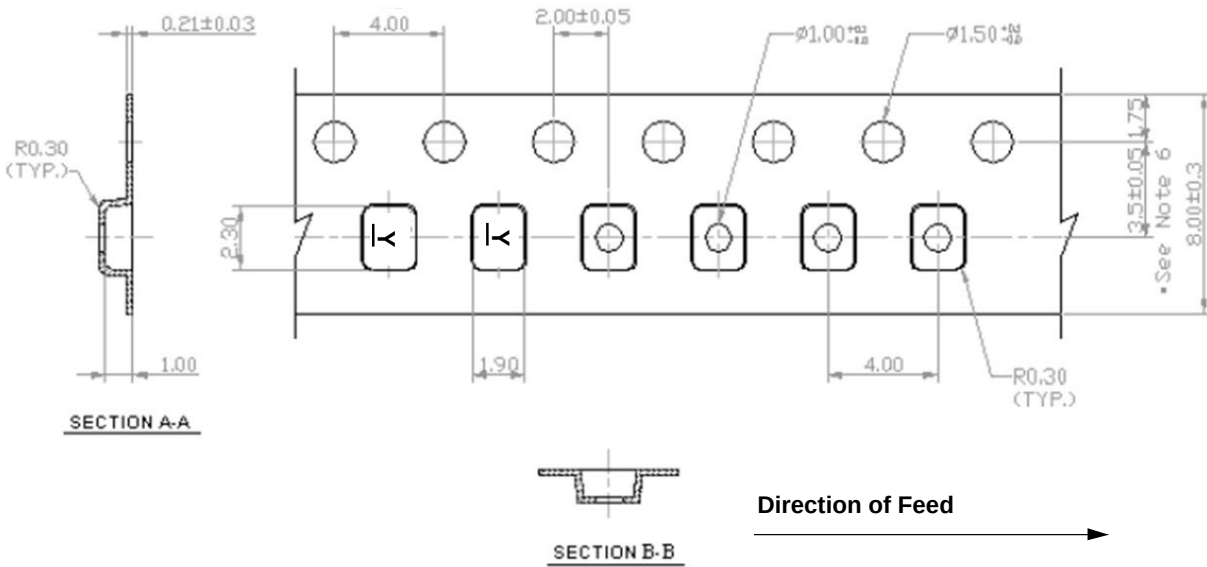
Tape and Reel Standard per ANSI/EIA-481

Reel Dimensions

Reel Count:
7" 2000
13" 10,000



Tape Dimensions



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 (10 seconds).
4. Time: 5 times maximum.

