

Preliminary



- 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

Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	+15	dBm
DC Voltage	5	VDC
Operable Temperature Range	-45 to +125	°C
Specification Temperature Range	-40 to +85	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C



1567.5 MHz SAW Filter



Electrical Characteristics

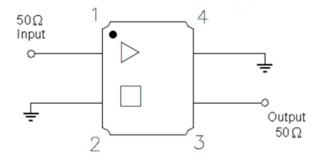
Characteristic	Sym	NOTE	-40 to +85C			UNITS
Characteristic			MIN	TYPICAL	MAX	
Center Frequency	Fc			1567.5		MHz
1 dB BW				30		MHz
Insertion Loss, 1556~1581 MHz	IL1			4.5	7.0	dB
Attenuation Referenced to 0 dB:						
880 to 1461 MHz			50	54		
1675 to 1800 MHz			50	54		
1800 to 2100 MHz			45	48		dB
2100 to 2500 MHz			40	43		
Temperature Coefficient of Frequency				-18		ppm/°C
Source impedance	Z _S			50		Ω
Load impedance	Z_{L}			50		Ω
Single-ended Input / Output Impedance Match			No matching network required for operation at 50 ohms			

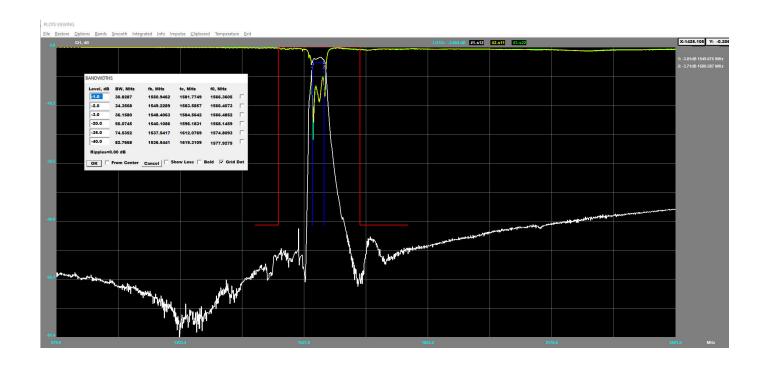
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling. NOTES:

- 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



PCB PAD LAYOUT - 2.2 -0.6 -0.8 Dimensions in mm

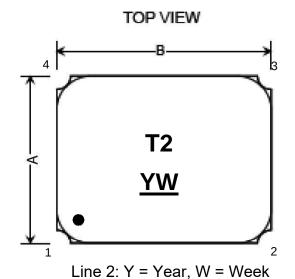
PCB Footprint Top View

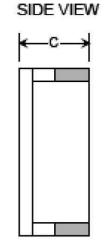
All pads have the same dimensions

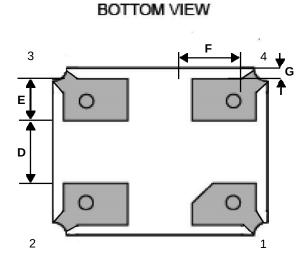
Electrical Connections

Connection	Terminals		
Input	1		
Output	3		
Ground	2, 4		

Dimensions	Millimeters			Inches		
	Min	Nom	Max	Min	Nom	Max
Α	1.58	1.65	1.72	0.062	0.064	0.067
В	1.98	2.05	2.12	0.077	0.080	0.083
С	-	-	0.9		0.035	0.035
D	-	0.60	-	-	0.023	-
Е	-	0.425	-	-	0.016	-
F	-	0.60	-	-	0.023	-
G	-	0.625	-	-	0.024	-
Н	-	0.10	-	-	0.003	-

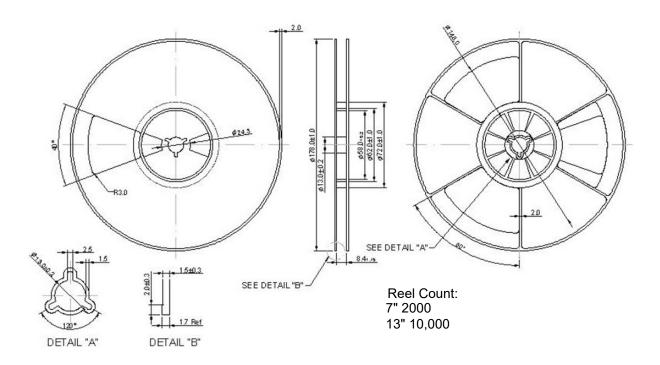




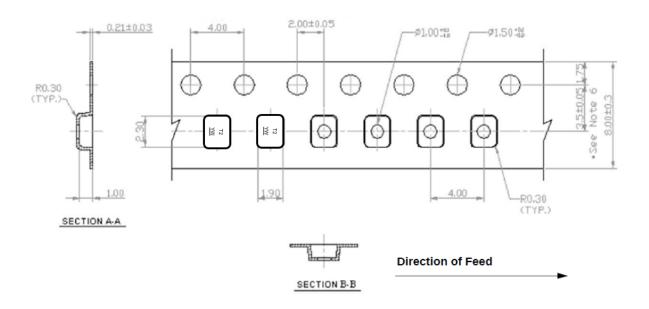


Tape and Reel Standard per ANSI/EIA-481

Reel Dimensions



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.

