



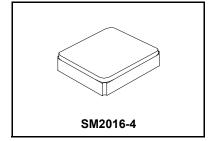
- RF Filter Designed for Front End GPS Applications
- · Low Insertion Loss
- · Improved Rejection
- 2.0 x 1.6 mm Surface-Mount Case
- Complies with Directive 2002/95/EC (RoHS)
- AEC-Q200 Qualified

#### **Absolute Maximum Ratings**

Rating	Value	Units		
Input Power Level	+10	dBm		
DC Voltage	3	VDC		
Operable Temperature Range	-40 to +105	°C		
Specification Temperature Range	-40 to +105	°C		
Storage Temperature Range	-40 to +105	°C		
Moisture Sensitivity Level	1	MSL		
Maximum Soldering Profile	265°C for 10 s			

#### SF2460H

# 1254.15 MHz SAW Filter



#### **Electrical Characteristics**

Item	Unit	Min.	Тур.	Max.	Note					
Center frequency	Fc	MHz	-	1254.15	-	-				
Insertion Loss (1219.8~1288.5 MHz)	IL	dB	-	4	5.0	-40~+85°C				
Insertion Loss (1219.8~1288.5 MHz)	IL	dB	-	4	5.2	-40~+105°C				
Amplitude Ripple (1219.8~1288.5 MHz)		dB	-	1.1	2.0	-				
Group Delay Ripple (1219.8~1288.5 MHz	<u>z)</u>	ns	-	4	20	-				
Return Loss (1219.8~1288.5 MHz)		dB	6.5	7.5	-	-				
Attenuation (Reference level from 0 dB)										
800 ~ 920 MHz		dB	37	41	-	-				
1710 ~ 1780 MHz		dB	39	43	-	-				
1850 ~ 1910 MHz		dB	39	42	-	-				
1920 ~ 1980 MHz		dB	40	44	-	-				
2400 ~ 2500 MHz		dB	41	46	-	-				
Temperature coefficient of frequency	ppm/k	-	-80	-	-					

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, <u>YW</u>					

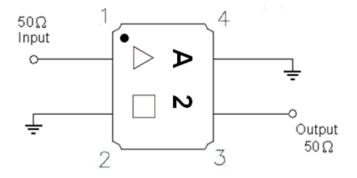
# W

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

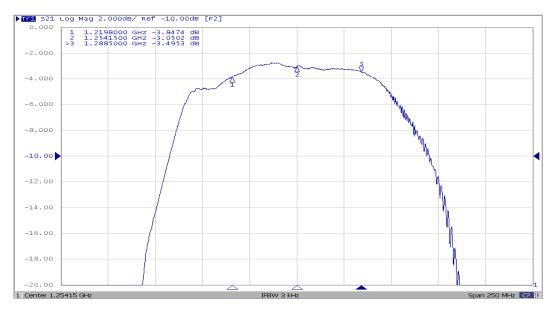
- 1. The design, manufacturing process, and specifications of this device are subject to change.
- 2. US or International patents may apply.
- 3. RoHS compliant from the first date of manufacture.

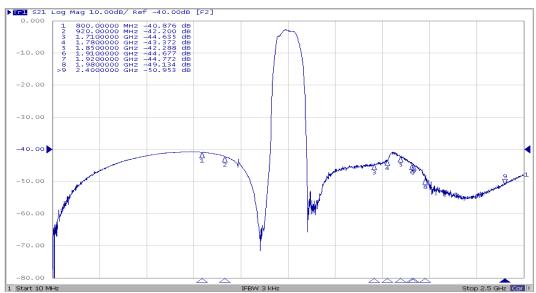
### **Measurement Circuit**

Connections	Terminal
Input	1
Output	3
Ground	2, 4

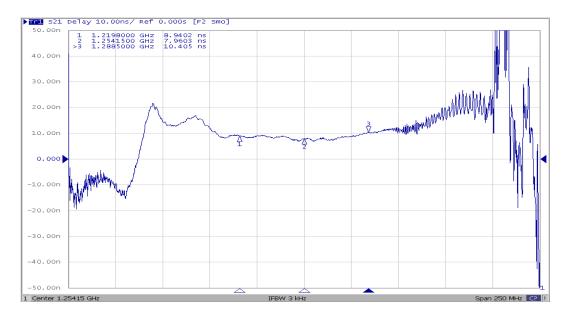


# **Frequency Characteristics**



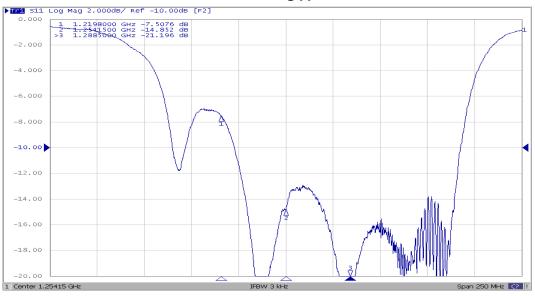


# **Group Delay**

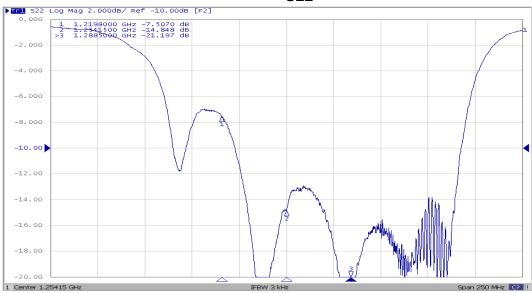


#### **Reflection Functions**

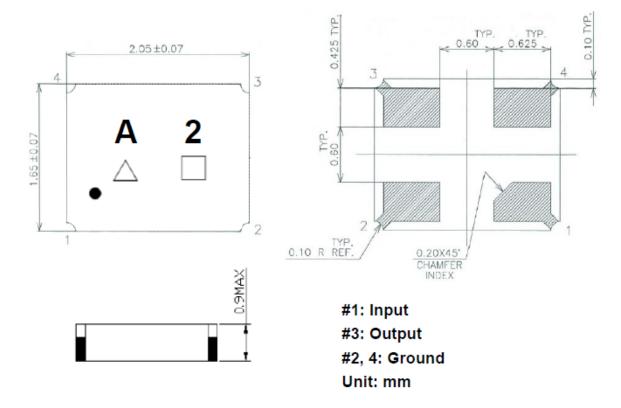
**S11** 



**S22** 



# **Outline Drawing**

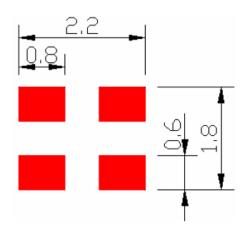


△: Year Code (2020->0, 2021->1,...,2029->9)

: Date Code (Follow the table from planner each year)

Date Code Table												
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
Α	В	С	D	Е	F	G	Н	I	J	K	L	М
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	0	Р	Q	R	S	Т	U	V	W	Х	Υ	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	С	d	е	f	g	h	i	j	k	- 1	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	0	р	q	r	S	t	u	V	W	Х	У	Z

## **PCB Footprint**

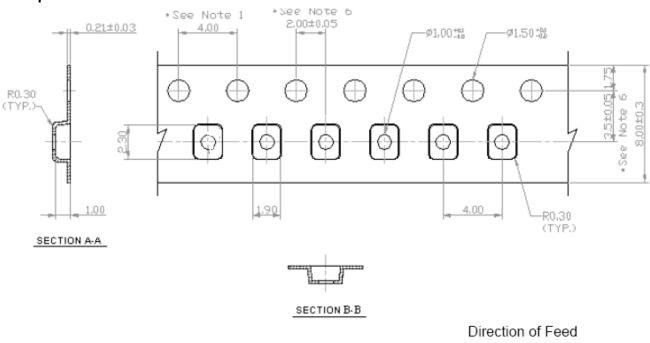


# **Packing**

#### Tape and Reel Standard per ANSI/EIA-481

# Reel Dimension 7" = 2000 13" = 10,000

#### **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 (10 seconds).
- 4. Time: 5 times maximum.

