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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# SMD 2442MHz SAW FILTER



AFS2442.0S4



3.0 x 3.0 x 1.4mm

## FEATURES:

- Small package
- Low Insertion Loss
- Excellent Attenuation Bandwidth

## APPLICATIONS:

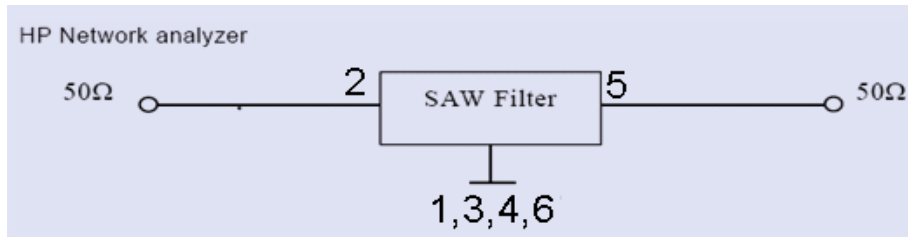
- Bluetooth Technology
- Mobile, GPS, ISM Band

## ELECTRICAL SPECIFICATIONS:

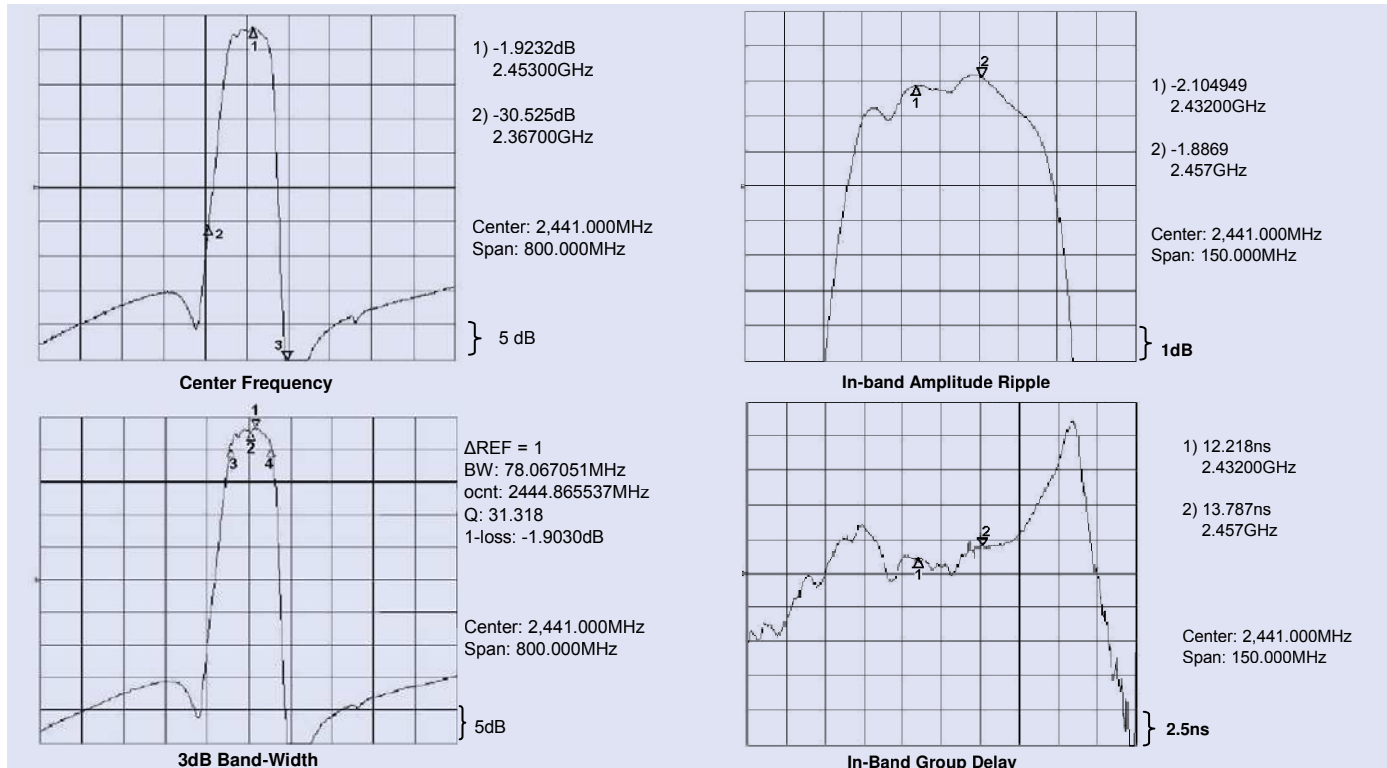
PARAMETERS	
ABRACON P/N	AFS2442.0S4
DC Voltage	10Vdc max.
Operating Temperature	-20°C to +70°C
Storage Temperature	-40°C to +85°C
Input Power Level	15 dBm average; 18 dBm Peak-Power with 5% Duty Cycle

Item	Units	Minimum	Typical	Maximum
Center Frequency Fc	MHz	2437.000	2442	2447.00
In-Band Insertion Loss (2437 ~ 2447 MHz)	dB	--	1.9	6.0
3-dB Bandwidth	MHz	--	78	--
Amplitude ripple (Fc ± 12.5MHz)	dB	--	0.25	2.0
Group delay (Fc ± 12.5MHz)	ns	--	12.5	--
Group delay ripple (Fc ± 5MHz)	ns	--	1.60	--
Attenuation				
D.C. ~ 2300 MHz	dB	37.0	41.0	--
2300 ~ 2367 MHz	dB	20.0	31.0	--
2517 ~ 2650 MHz	dB	40.0	44.0	--
2650 ~ 4000 MHz	dB	25.0	31.0	--
Return Loss	dB	--	12.0	--
Source impedance	Ω	--	50	--
Load impedance	Ω	--	50	--

## TEST CIRCUIT:



## FREQUENCY CHARACTERISTICS (Transfer Function):



ABRACON IS  
ISO 9001 / QS 9000  
CERTIFIED



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# SMD 2442MHz SAW FILTER

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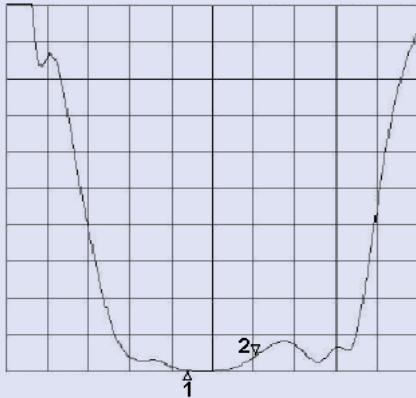
RoHS  
Compliant



3.0 x 3.0 x 1.4mm

## FREQUENCY CHARACTERISTICS (Reflection Function):

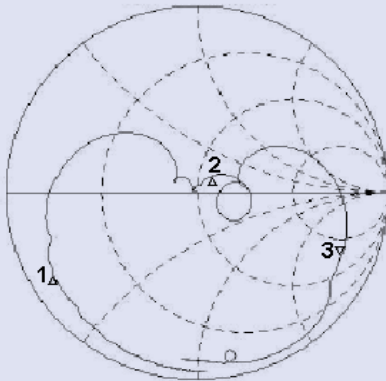
### Input VSWR



- 1) 1.0455  
2.43200GHz
- 2) 1.4482  
2.457GHz

Center: 2,441.000MHz  
Span: 150.000MHz

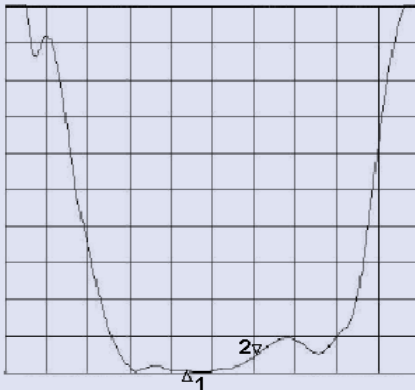
} 2.00 VSWR per Division



- 1: 3.7559Ω  
-13.361Ω  
2.36700GHz
- 2: 57.404Ω  
10.383Ω  
2.45300GHz
- 3: 87.805Ω  
-191.95Ω  
2.517GHz

Center: 2,441.000MHz  
Span: 800.000MHz

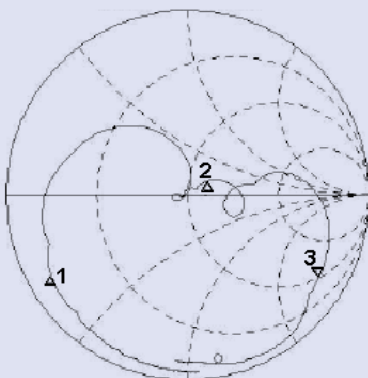
### Output VSWR



- 1) 1.0455  
2.43200GHz
- 2) 1.4908  
2.457GHz

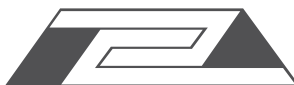
Center: 2,441.000MHz  
Span: 150.000MHz

} 2.00 VSWR per Division



- 1) 3.7866Ω  
-13.022Ω  
2.36700GHz
- 2) 61.475Ω  
9.2983Ω  
2.45300GHz
- 3) 50.805Ω  
-162.07Ω  
2.517GHz

Center: 2,441.000MHz  
Span: 800.000MHz



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AFS  
2442.0S4

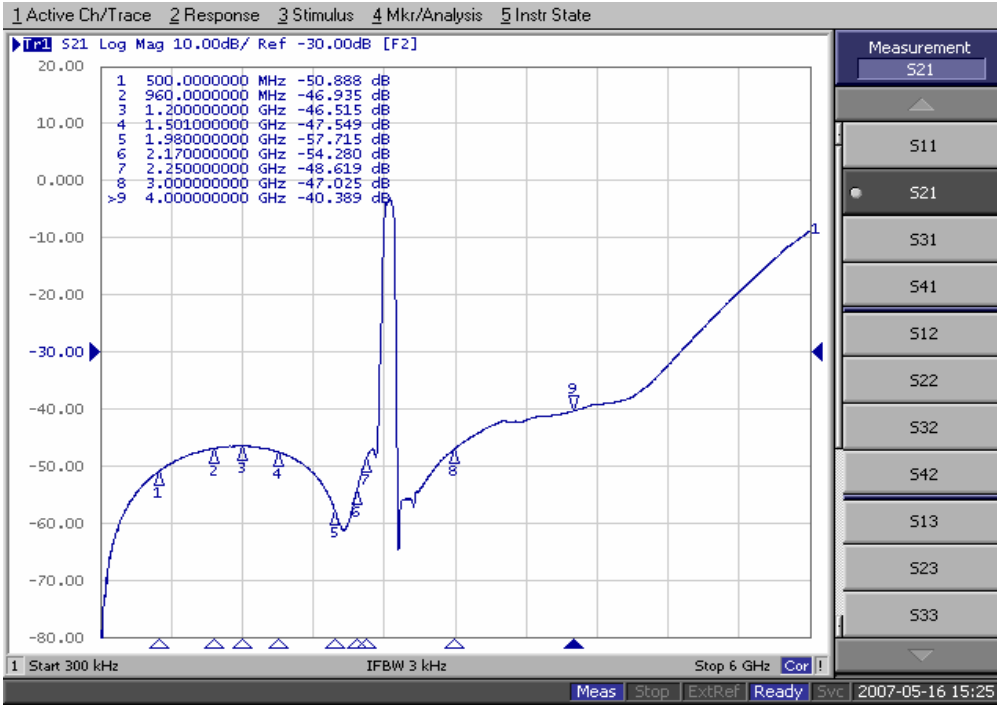


3.0 x 3.0 x 1.4mm



RoHS  
Compliant

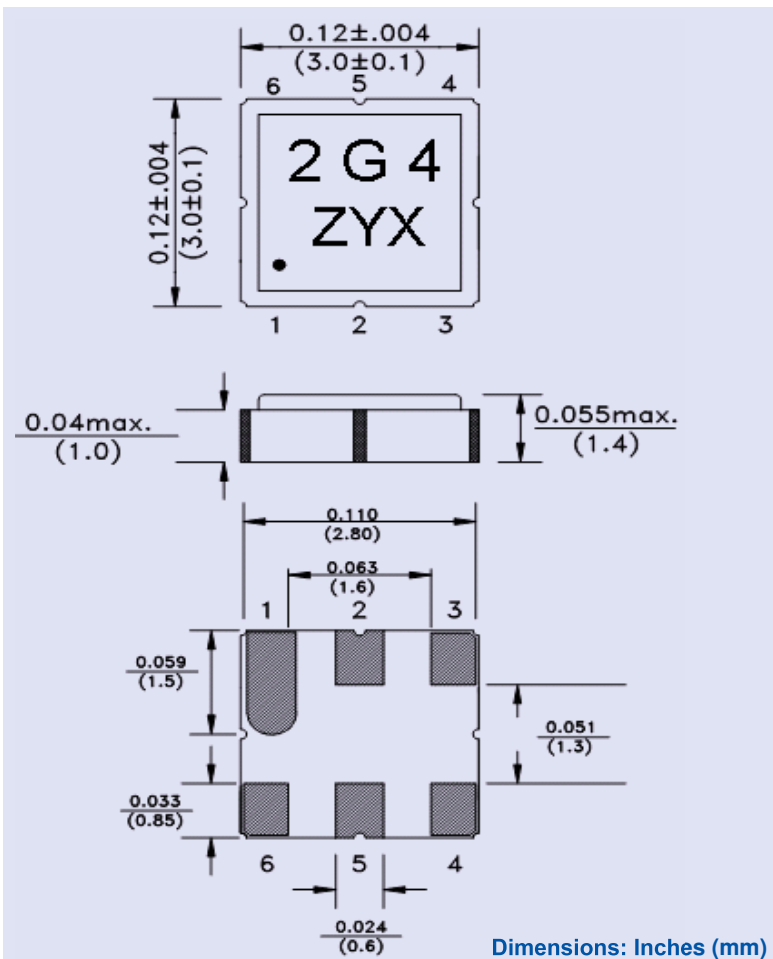
## FREQUENCY CHARACTERISTICS (Reflection Function):



## S21 Table

Characteristic	typ. Value (dB)
D.C. ~ 500 MHz	50.9
500 ~ 960 MHz	47.0
960 ~ 1200 MHz	46.5
1200 ~ 1501 MHz	46.5
1501 ~ 1980 MHz	47.5
1980 ~ 2170 MHz	54.4
2170 ~ 2250 MHz	48.7
2700 ~ 3000 MHz	47.0
3000 ~ 4000 MHz	39.5
4000 ~ 6000 MHz	9.0

## OUTLINE DRAWING:



Pin	Function
1	Ground
2	Input
3	Ground
4	Ground
5	Output
6	Ground

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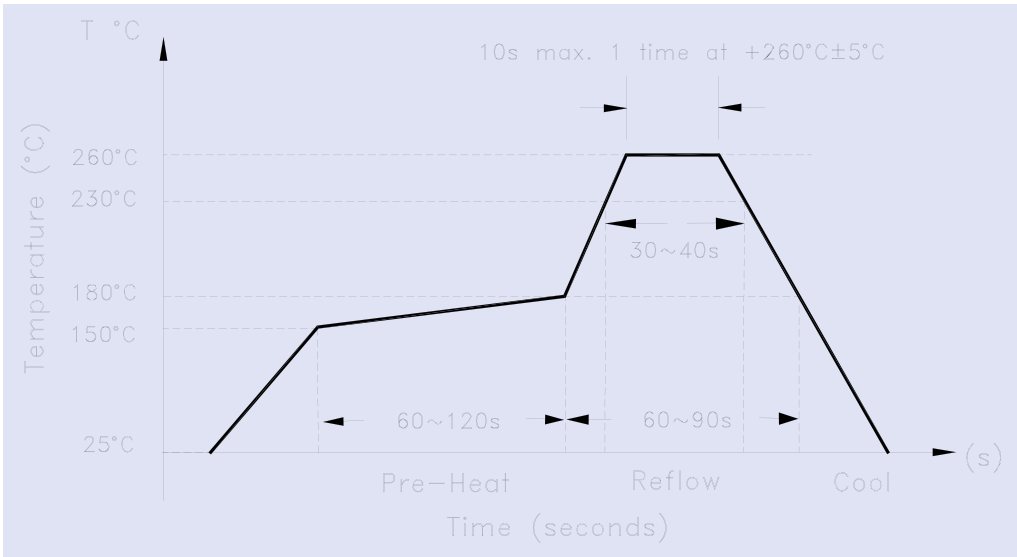
**RoHS**  
Compliant



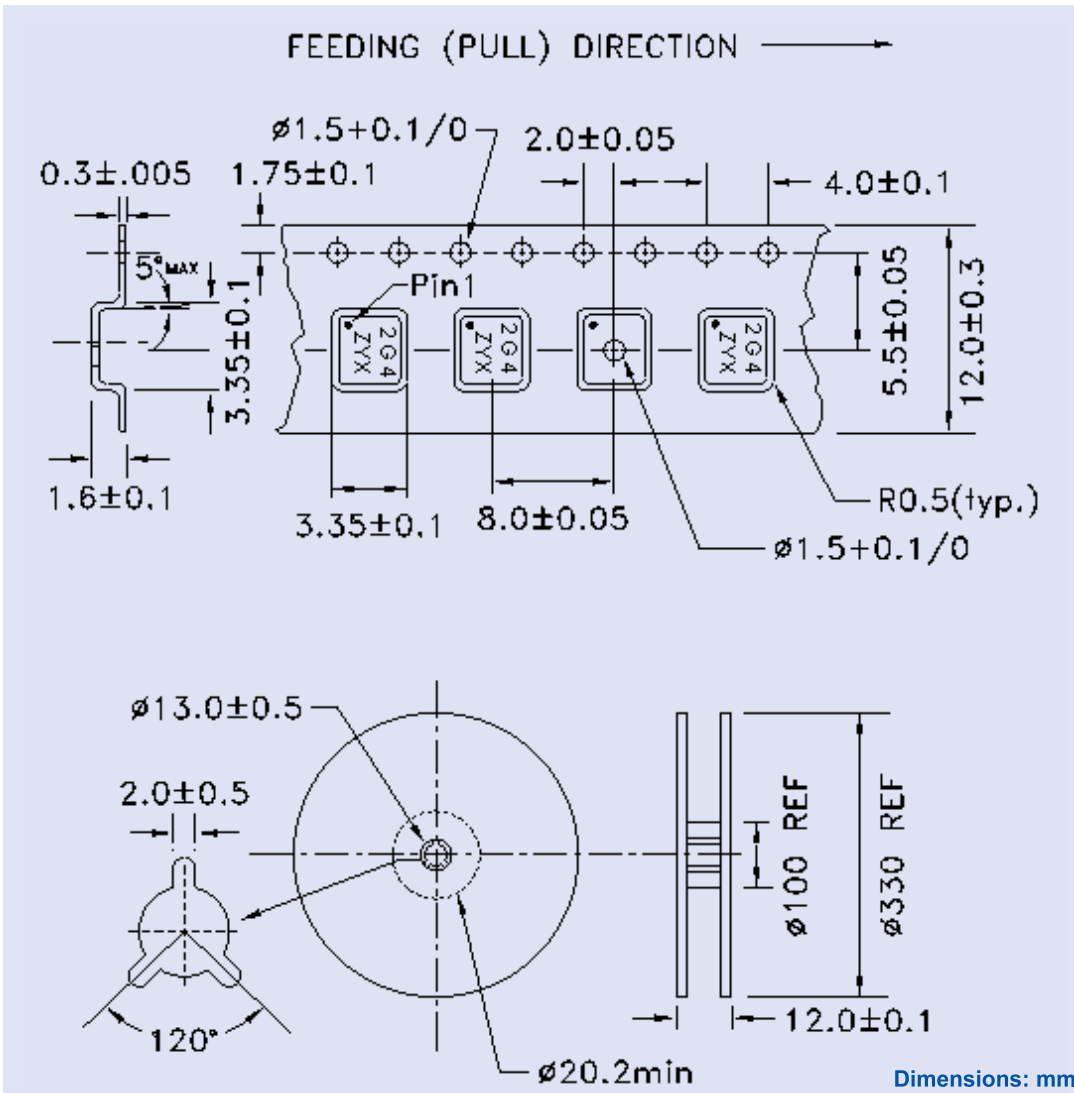
AFS  
2442.0S4

3.0 x 3.0 x 1.4mm

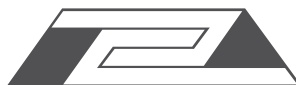
## REFLOW PROFILE:



## TAPE & REEL: T= tape and reel (1000 pcs / reel)



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