

Surface Mount 1575.42MHz SAW Filter

AFS20A42-1575.42-T2



RoHS
Compliant



2.0 x 1.6 x 0.9 mm

FEATURES:

- 2.0 x 1.6 x 0.9 mm low profile SMT package
- Low Insertion loss
- Excellent selectivity with high out-of-band rejection

APPLICATIONS:

- Wireless Communication
- Remote Control
- Cellular Phones

ELECTRICAL SPECIFICATIONS:

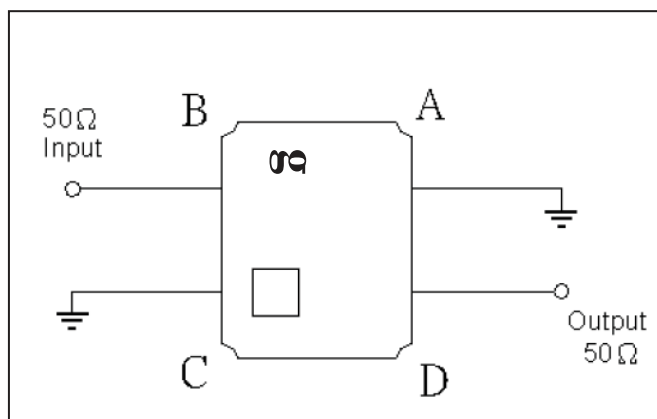
Maximum Ratings

Item	Value
Input Power Level	+10 dBm max.
DC Permissive Voltage	7.5V DC max.
Operating Temperature Range	-40°C to + 85°C
Storage Temperature Range	-40°C to + 95°C

Parameters	Minimum	Typical	Maximum	Units	Notes
Center Frequency (f_c)		1575.42		MHz	
Insertion Loss (IL)		1.20	1.60	dB	1574.42 ~ 1576.42MHz
3-dB Bandwidth		42		MHz	
Amplitude Ripple		0.1	0.8	dB	1574.42 ~ 1576.42MHz
Worst-Case Input / Output Return Loss		20	10	dB	1574.42 ~ 1576.42MHz
Stop-band Attenuation (Referenced to 0.0 dB)	20	34		dB	DC ~ 1000MHz
	30	39			1625MHz ~ 1635MHz
	25	32			1800MHz ~ 3000MHz
Source Impedance (Z_S)		50		Ω	See note # 1
Load Impedance (Z_L)		50		Ω	See note # 1

Note #1: No matching network required for operation into 50 Ω 's

TEST CIRCUIT:



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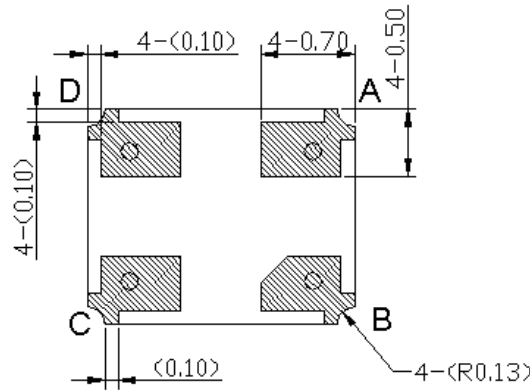
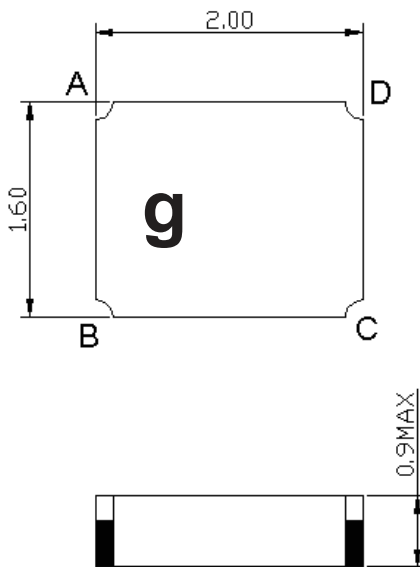


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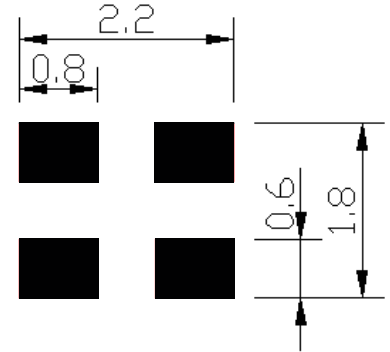


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OUTLINE DIMENSIONS:



Recommended Land Pattern:

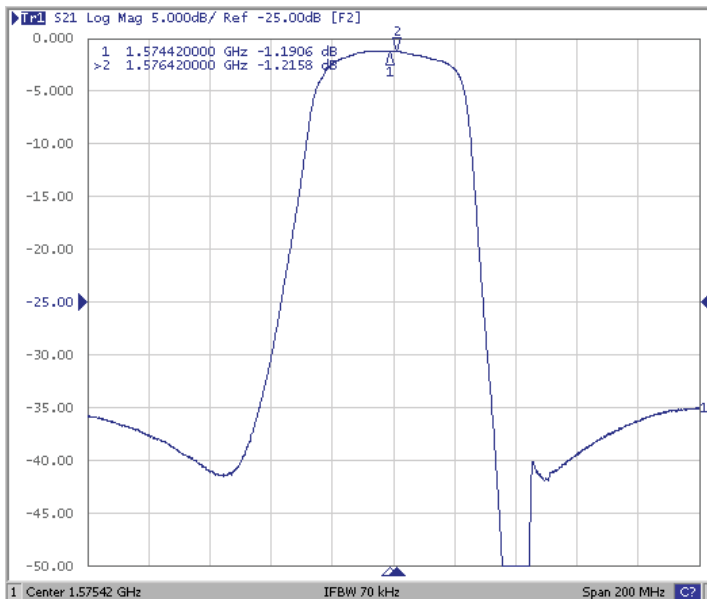


#B:	Input
#D:	Output
#A,C:	Ground
Unit:	mm

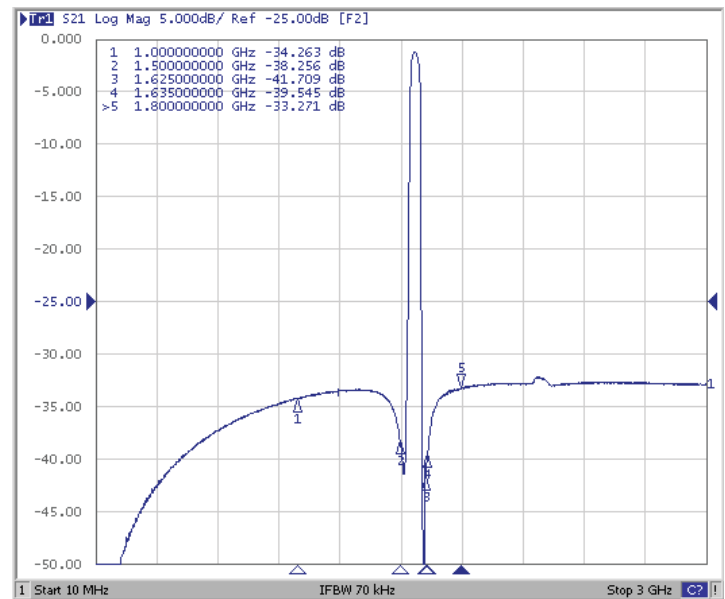
*All Dimensions are in mm

FREQUENCY CHARACTERISTICS:

Filter Frequency Response (Narrowband)



Filter Frequency Response (Wideband)



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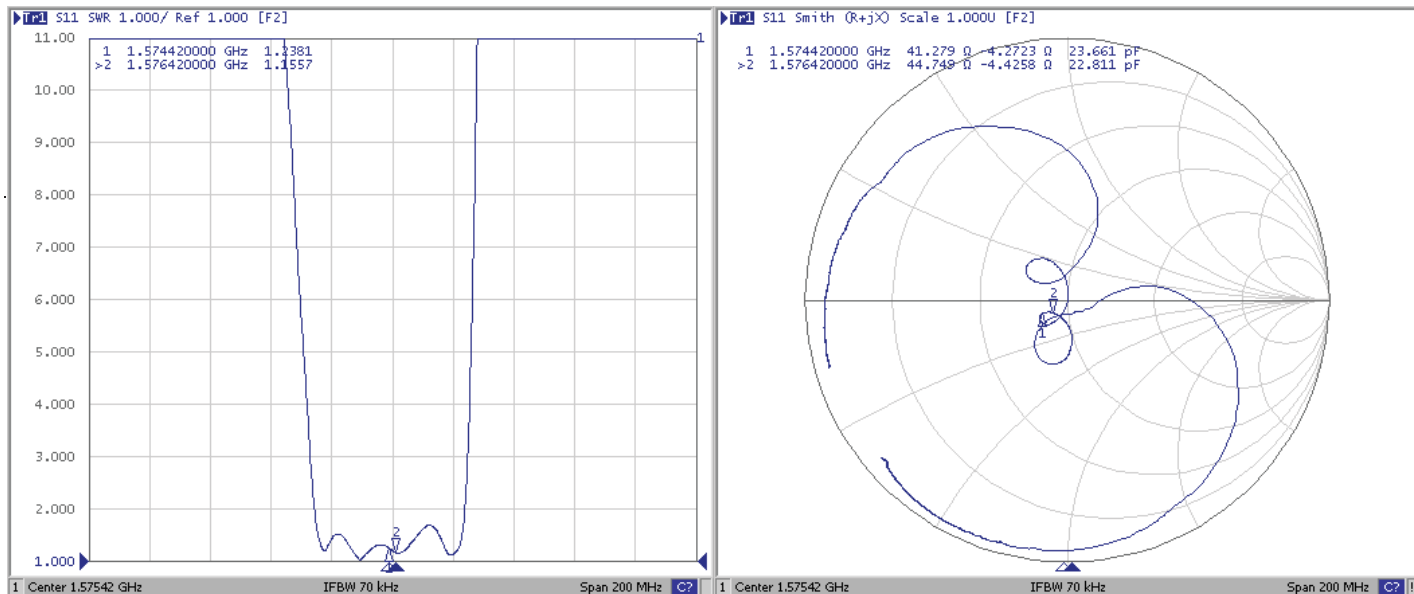
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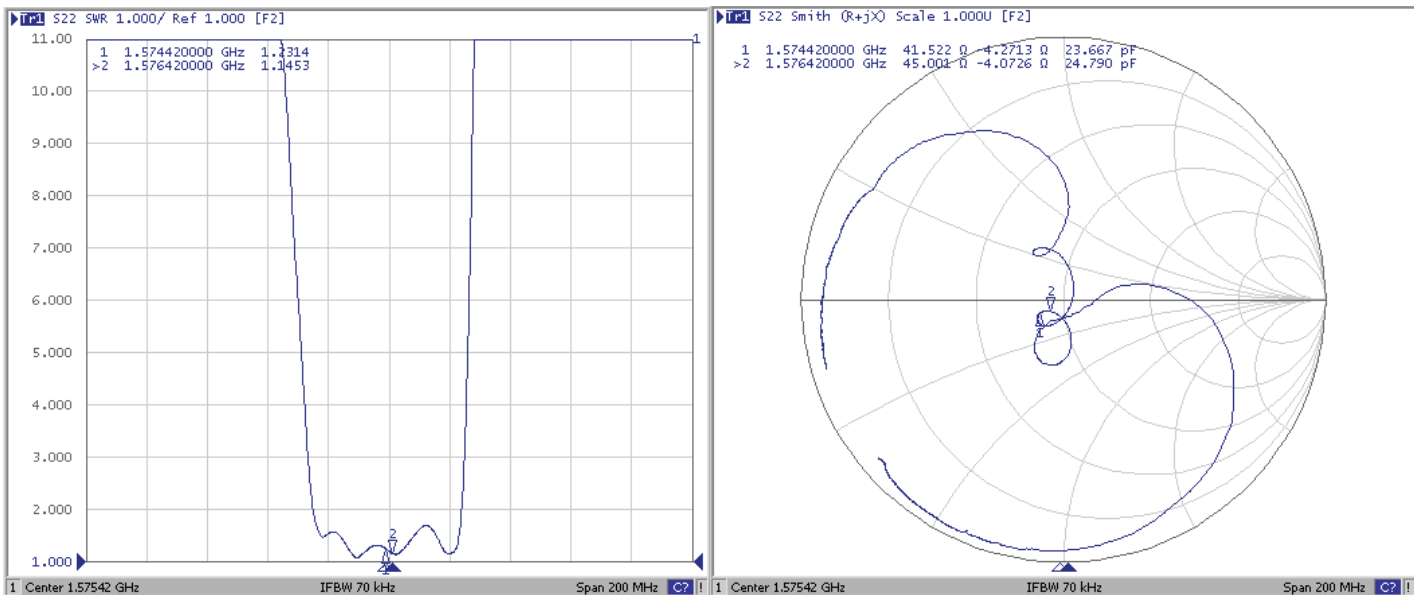
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REFLECTION FUNCTIONS

S11



S22



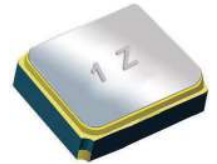
Note # 2: Detail S parameter information (.s2p file) available upon request

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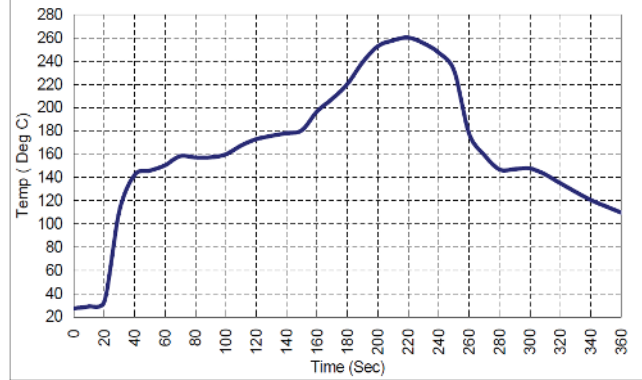


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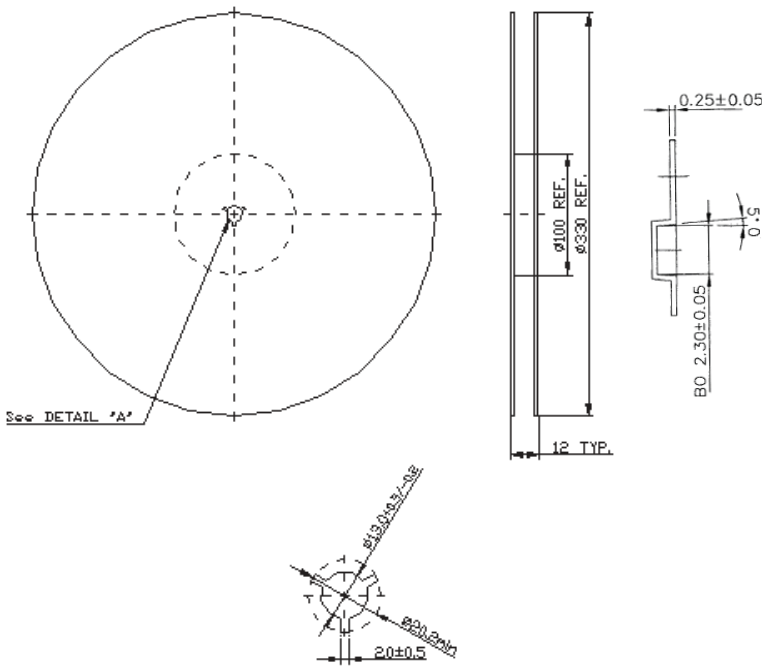
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REFLOW PROFILE:

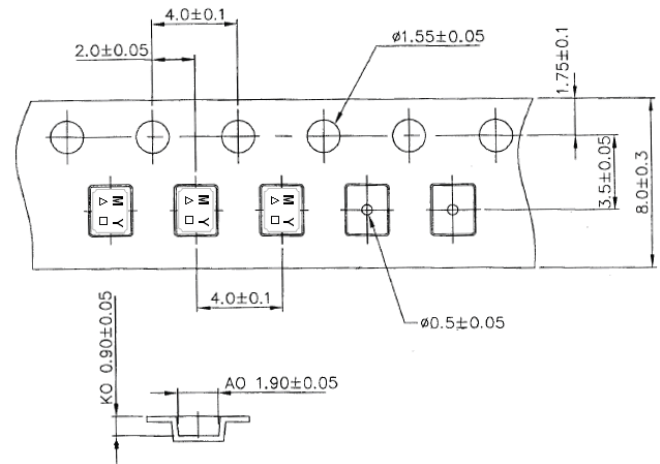


PACKAGING: 2000 Units/Reel

Reel Dimensions



Tape Dimensions



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