

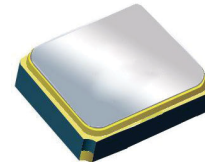
Surface Mount 1575.42MHz SAW Filter

AFS20A02-1575.42-T3

Moisture Sensitivity Level (MSL) – This product is Hermetically Sealed and not Moisture Sensitive - MSL = N/A: Not Applicable



RoHS
Compliant



2.0 x 1.6 x 0.9 mm

FEATURES:

- 2.0 * 1.6 * 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:

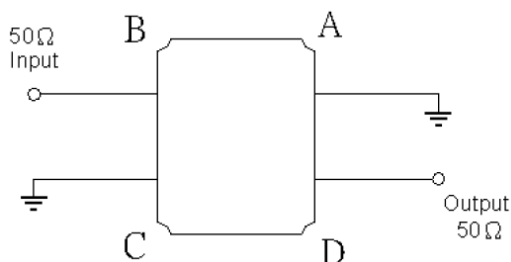
Maximum Ratings

Item	Value
Input Power Level	+10 dBm max.
DC Permissive Voltage	3V DC max.
Operating Temperature Range	-40°C to + 85°C
Storage Temperature Range	-55°C to + 95°C

Parameters	Minimum	Typical	Maximum	Units	Notes
Center Frequency (f_c)		1575.42		MHz	
Insertion Loss (IL)		1.15	1.60	dB	1574.42 ~ 1576.42MHz
Effective Bandwidth		2		MHz	
Amplitude Ripple		0.1	0.5	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)	31	33		dB	100MHz ~ 960MHz
	31	33			960MHz ~ 1460MHz
	22	26			1460MHz ~ 1513MHz
	22	28			1648MHz ~ 1710MHz
	25	32			1710MHz ~ 1990MHz
	25	30			1990MHz ~ 2300MHz
	29	31			2300MHz ~ 4000MHz
	20	24			4000MHz ~ 6000MHz
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:

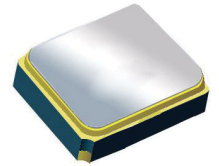


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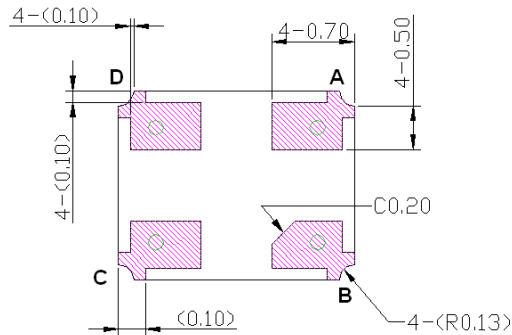
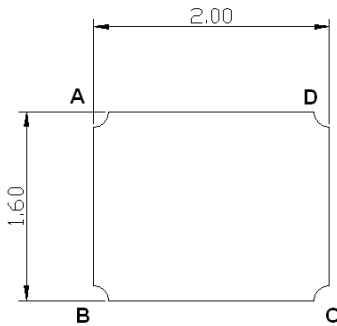


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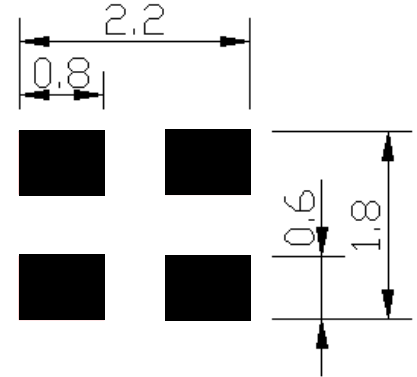


2.0 x 1.6 x 0.9 mm

OUTLINE DIMENSIONS:



Recommended Land Pattern:

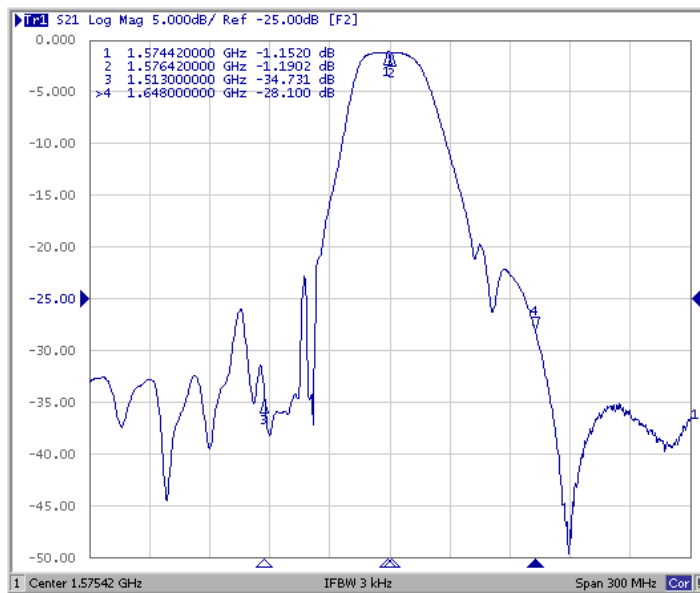


#B:	Input
#D:	Output
#A,C:	Ground
Unit:	mm

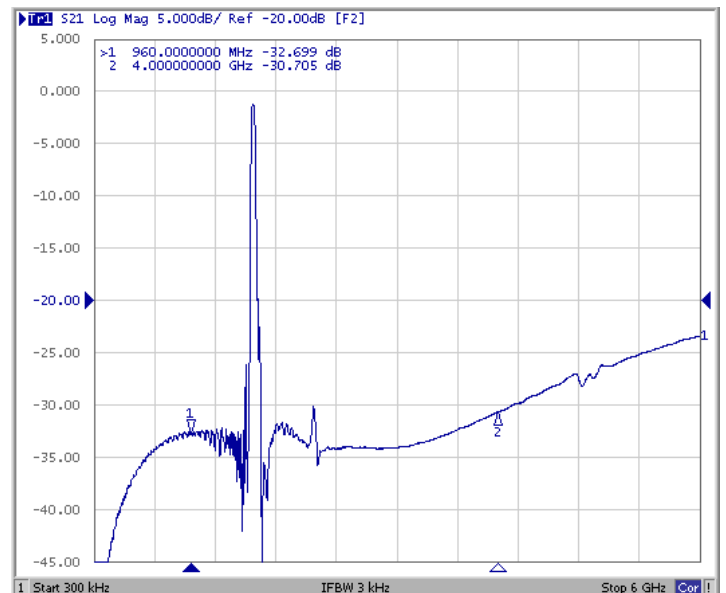
*All Dimensions are in mm

FREQUENCY CHARACTERISTICS:

Filter Frequency Response (Narrowband)



Filter Frequency Response (wideband)

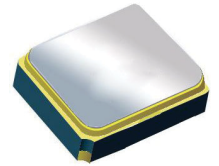


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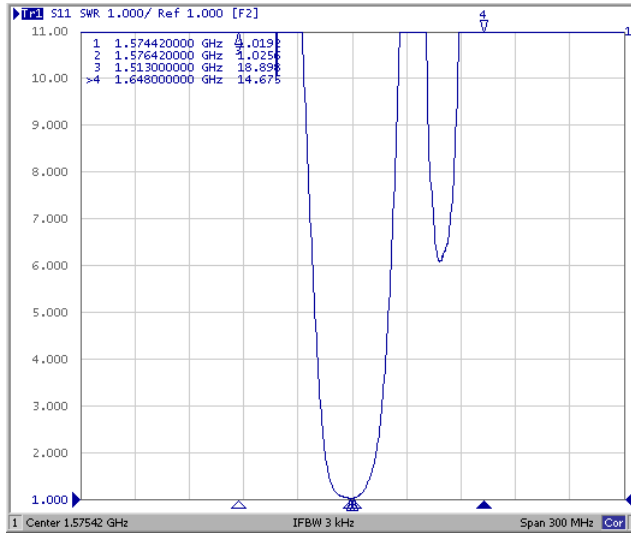
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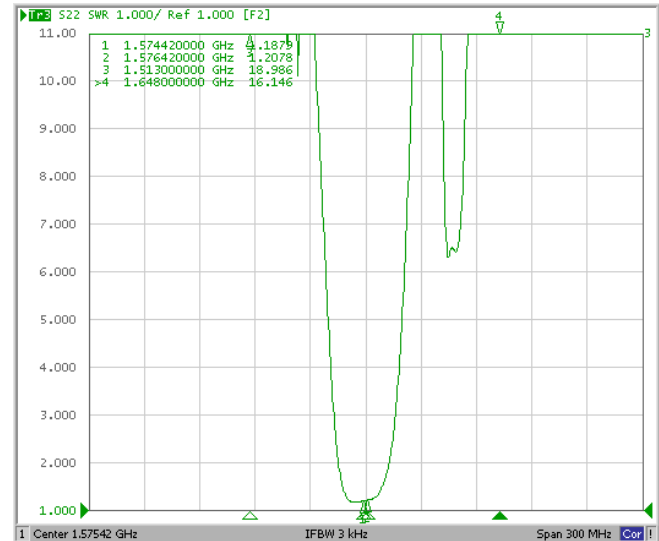
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REFLECTION FUNCTIONS:

S11

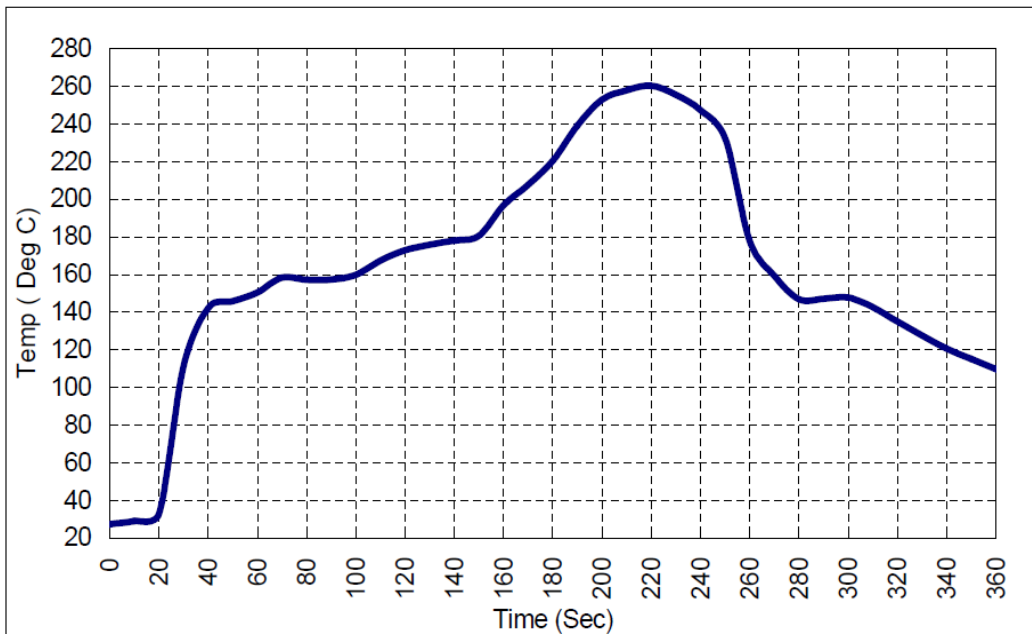


S22



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

REFLOW PROFILE:

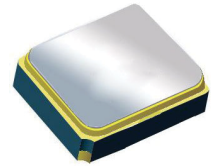


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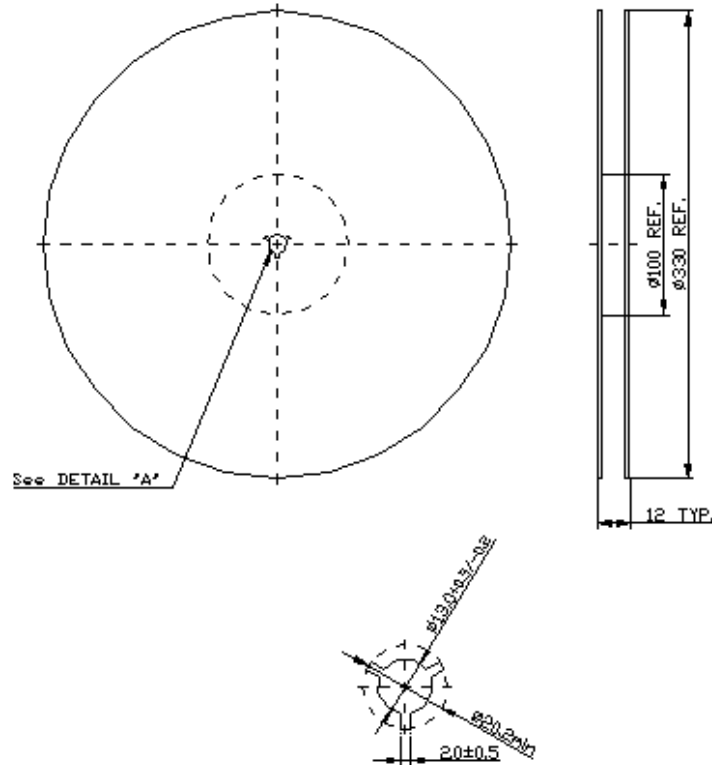
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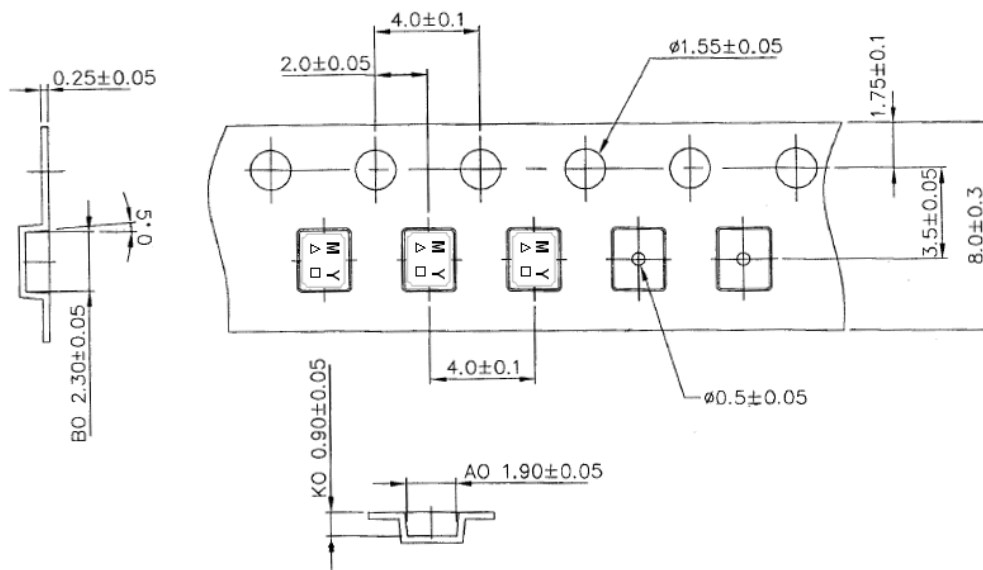
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PACKAGING: 3,000 units/reel “-T2” parts (2k/reel) are no longer available effective 01/01/2013

Reel Dimensions



Tape Dimensions



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