

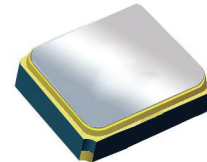
Surface Mount 1591.5 MHz SAW Filter

AFS14A35-1591.5-T3

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



RoHS
Compliant



1.4 x 1.1 x 0.7 mm

FEATURES:

- 1.4 x 1.1 x 0.7 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:

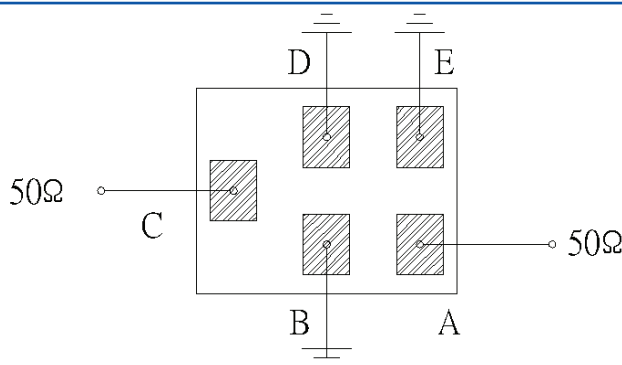
Maximum Ratings

Item	Value
Input Power Level	+10 dBm max.
DC Permissive Voltage	3.0V DC max.
Operating Temperature Range	-40°C to + 85°C
Storage Temperature Range	-40°C to + 85°C

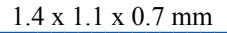
Parameters	Minimum	Typical	Maximum	Units	Notes
Center Frequency (f_c)		1591.5		MHz	
Insertion Loss (IL)		2.4	3.7	dB	1574~1609 MHz
Effective Bandwidth		35		MHz	
Amplitude Ripple		1.3	2.6	dB	1574~1609 MHz
Worst-Case Input / Output Return Loss	7.7	9.5		dB	1574~1609 MHz
Group Delay Variation		17	50	ns	1574~1609 MHz
Stop-band Attenuation (Referenced to 0.0 dB)	28	34		dB	10 ~1200 MHz
	28	34			1200~1450 MHz
	20	37			1450~1540 MHz
	9	31			1626~1710 MHz
	30	37			1710~2000 MHz
	30	37			2000~2500 MHz
Temperature Coefficient of frequency		-36		ppm/°C	
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

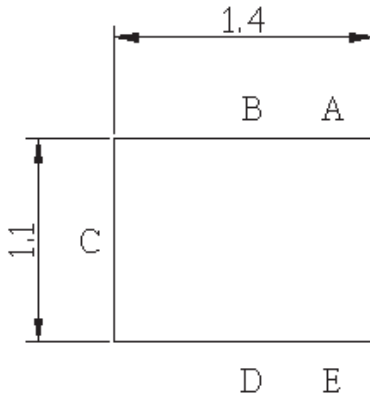
TEST CIRCUIT:



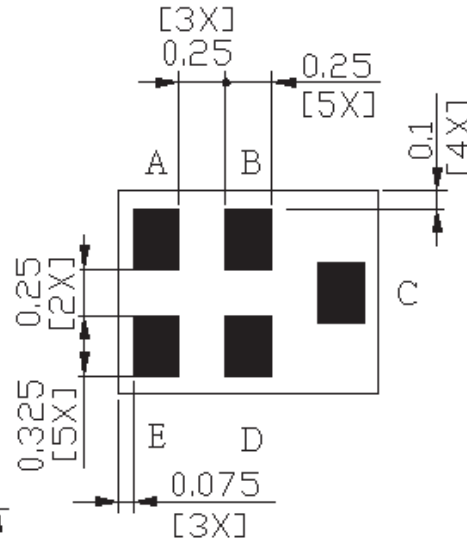
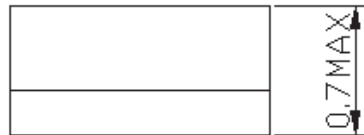
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top view



side view



bottom view

C:	Input
A:	Output
B, D, E:	Ground

Technical drawing of a stepped shaft with dimensions in mm. The shaft has a total length of 1.3 mm. The dimensions are as follows:

- Top view:
 - Overall diameter: 0.425 mm
 - Step diameter: 0.25 mm
 - Step width: 0.25 mm
 - Distance from end to step: 0.325 mm
 - Distance from step to end: 0.525 mm
- Side view:
 - Overall length: 1.3 mm
 - Step height: 0.25 mm
 - Distance from end to step: 0.325 mm
 - Distance from step to end: 0.525 mm
 - Step width: 0.25 mm
 - Distance from end to step: 1.6 mm

Unit : mm

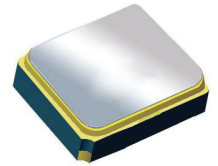
*All Dimensions are in mm

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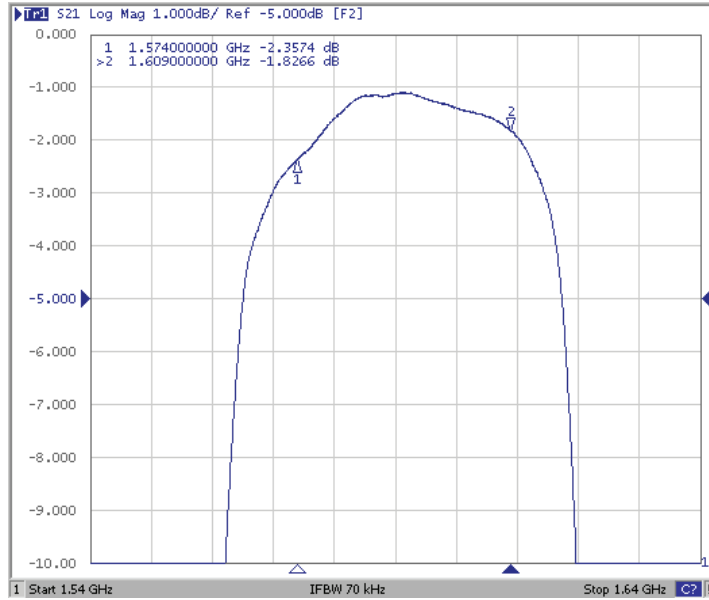
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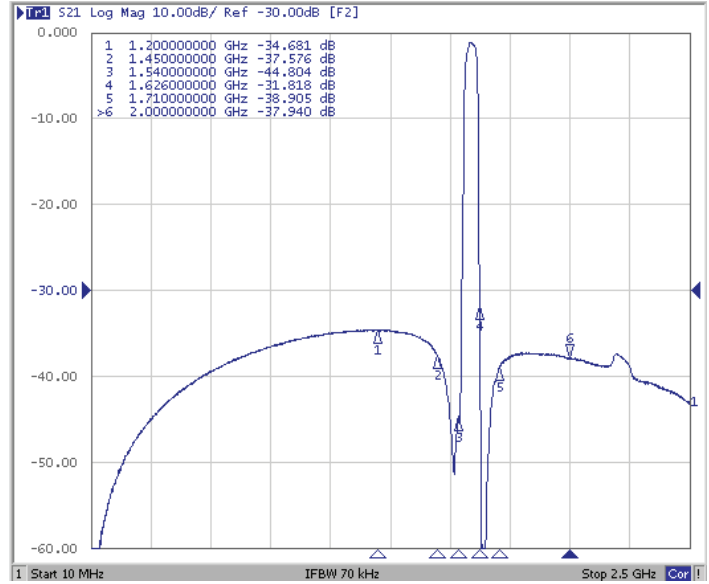
1.4 x 1.1 x 0.7 mm

FREQUENCY CHARACTERISTICS:

Filter Frequency Response (Narrowband)

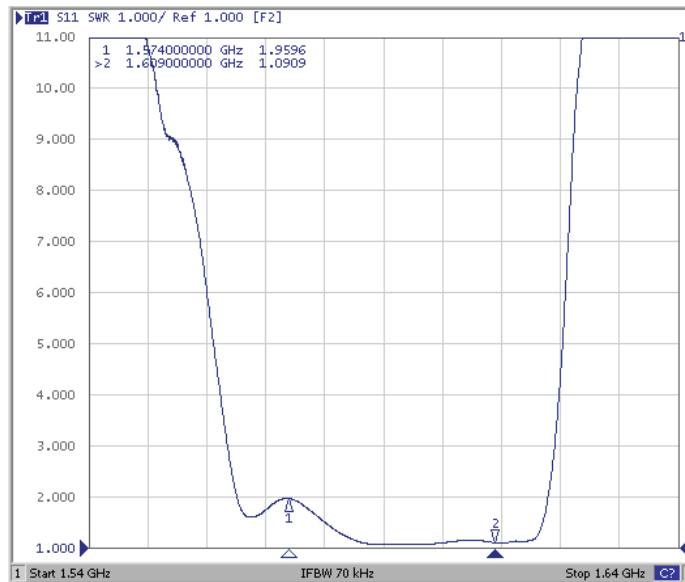


Filter Frequency Response (Wideband)

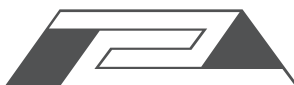
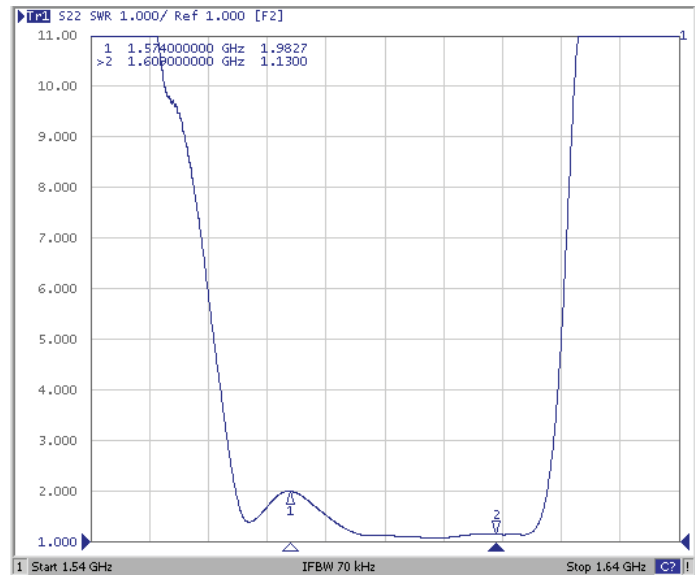


REFLECTION FUNCTIONS:

S11



S22

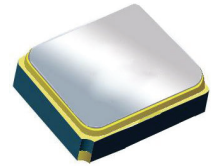


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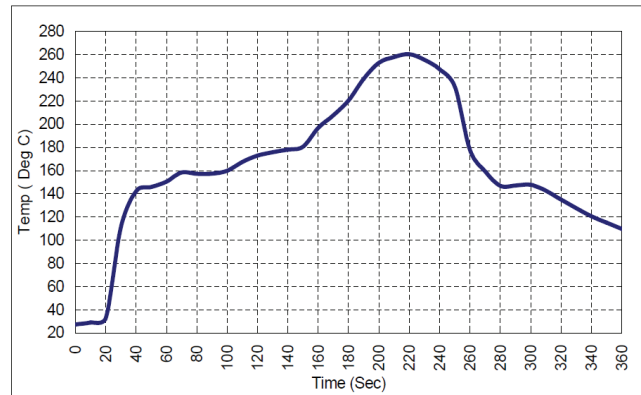


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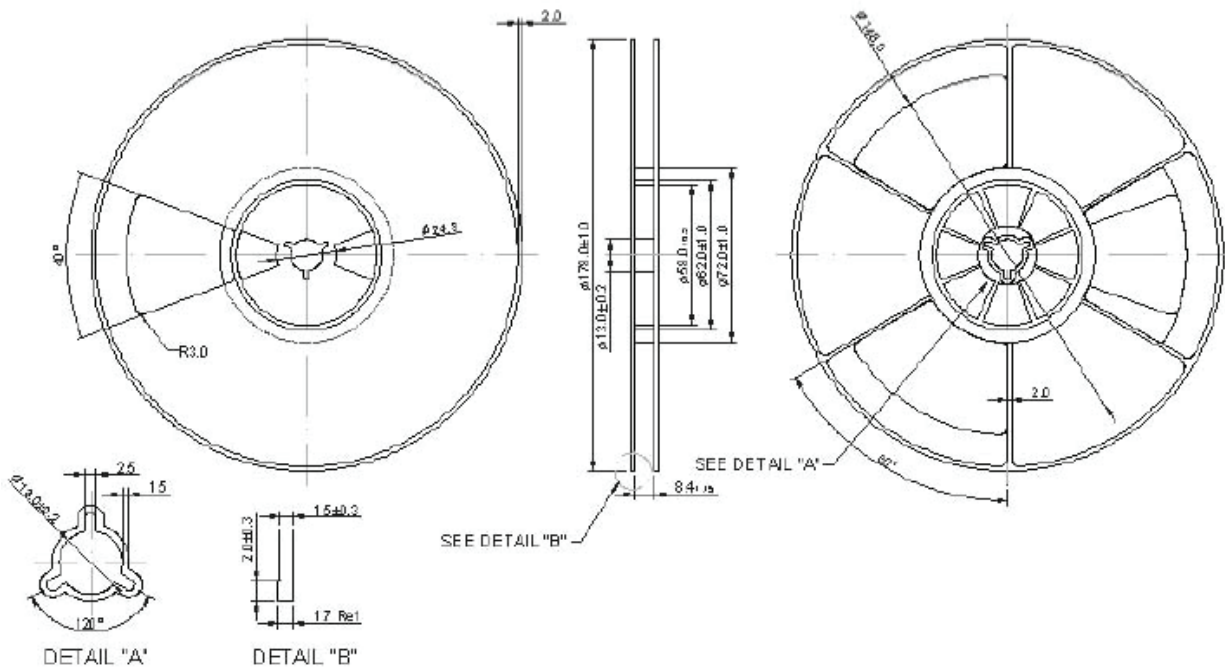
1.4 x 1.1 x 0.7 mm

REFLOW PROFILE:



PACKAGING: 3000 Units/Reel

Reel Count : 7" = 3k units



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