

# XLF0420A

## <4.2 GHz “Clean-up” Lowpass Filter

### Features

- High-power handling in small size
- Low Insertion Loss and Ripple.
- Provides excellent 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> harmonic rejection

### Applications

- Wireless Infrastructure applications

### Description

Low-pass filter with high power handling engineered to provide a complete system solution for harmonic suppression need in a single surface-mount component.

### Electrical Specifications

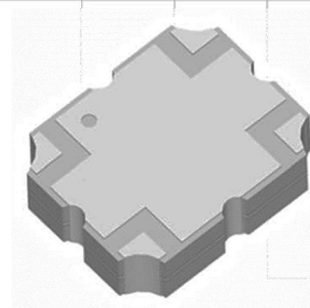
Parameter	Frequency (MHz)	Typical at 25°C	Spec. at 25°C	Spec. over -40°C to +85°C
Nominal Impedance	-	50 ohms	-	-
Average Input Power per port	-	-	-	6.0 Watt max
Peak Input Power per port	-	-	-	60 Watt max

#### Input-Output Response

Passband Insertion Loss	3300 - 4200	0.65 dB max
Passband Return Loss	3300 - 4200	16 dB min
Attenuation:	6600 - 7599	24 dB min
(2 <sup>nd</sup> & 3 <sup>rd</sup> harmonics)	7600 – 12600	40 dB min
(4 <sup>th</sup> & 5 <sup>th</sup> harmonics)	13200 - 21000	15 dB min
		<b>Goal: 20 dB</b>

Note: CTS tests each unit to the critical specifications above. Subsequent audits may deviate due to repeatability among different test systems which shall not exceed these allowances.

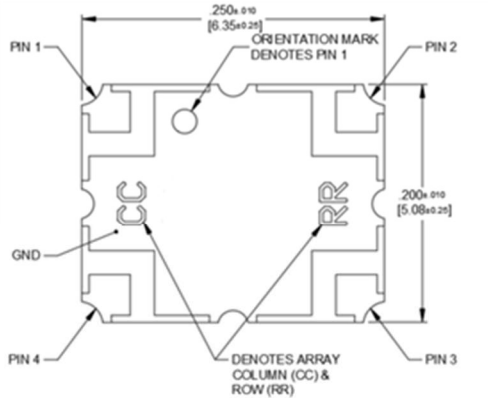
Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB



Part Dimensions: 6.5 × 5.1 × 1.8 mm • 0.1 g

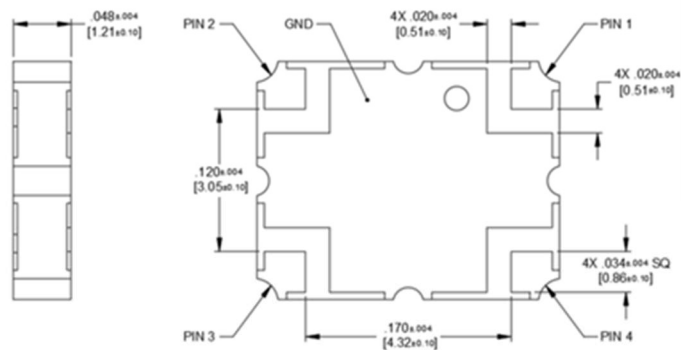
### Mechanical Drawing

#### Top-side



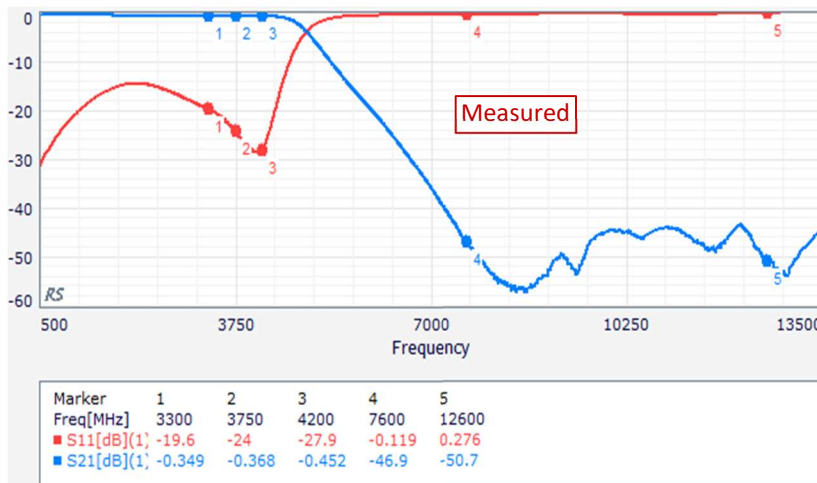
Dimensions are in Inches [Millimeters]

#### Bottom-side



TOLERANCES ARE NON-CUMULATIVE

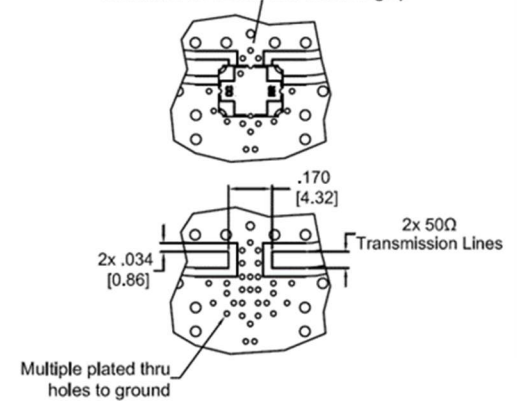
### Electrical Response



### Pin Assignments And PCB Layout

Pin 1	Pin 2	Pin 3	Pin 4
Input	Output	Ground	Ground

To ensure proper electrical and thermal performance there must be a ground plane with 100% solder connection underneath the part orientated as shown with text facing up

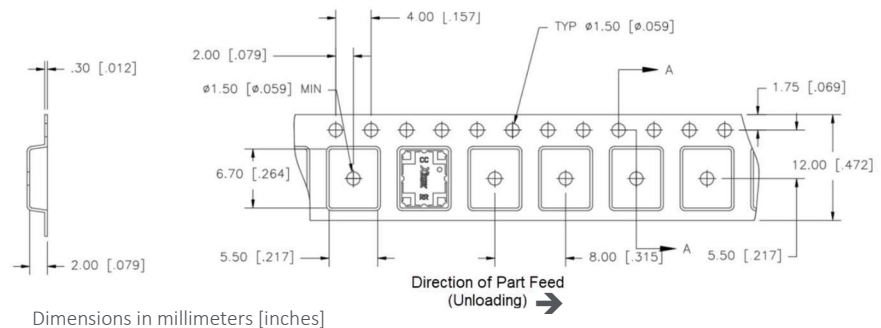


Dimensions are in Inches [Millimeters]

### Ordering Information

Model	Packaging
XLF420A	Tape & Reel

Dimension	Units	Spec.
Reel Diameter	mm	330
Reel Weight	kg	
Reel Quantity	ea.	2000



Dimensions in millimeters [inches]