

Specifications



FEATURES

Netcom's 3615-4.5 is a bandpass LC filter with a center frequency of 40MHz.

Netcom 3615-4.5 belongs to Netcom's LC filter family that has a center frequency range from 40Mhz to 160MHz.

The filter is an industry leading design specifically targeting military and commercial radio applications. This filter is designed to meet military standards for test methods of industry ANSI standards for dimensioning and Tolerancing. The relative size of the filter makes it an ideal option for use within military and commercial handset radios as well as vehicular mounted radio applications.

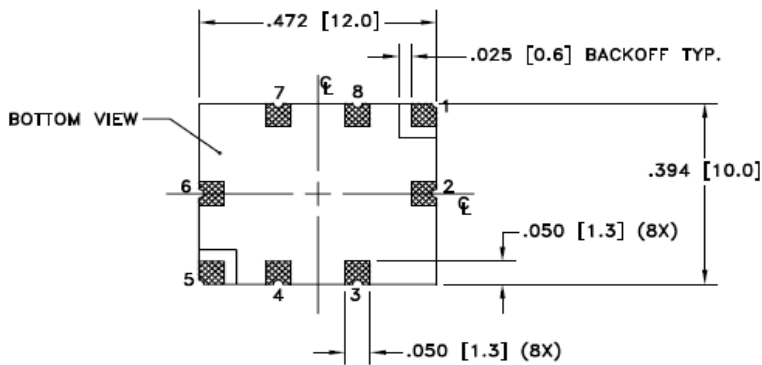
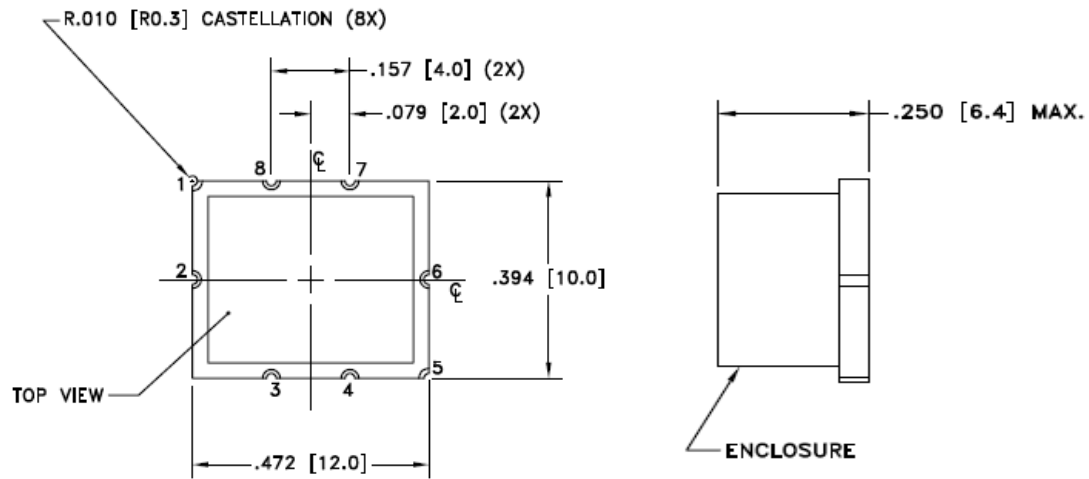
The following table shows the typical performance of the filter.

Other frequencies and BW options are available upon request.

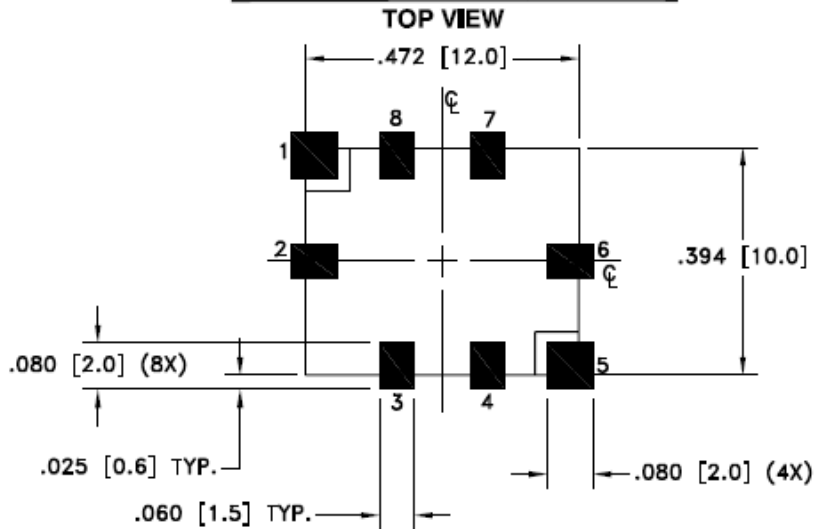
Center Frequency	40 MHz
3dB Bandwidth	4.5 MHz
*Insertion Loss	2.5 dB
*Pass Band Ripple	0.5 dB (max)
High Power Input	27 dBm (max)
*Absolute Group Delay	160 nsec (max)
*Group Delay Variation	30 nsec (max)
Selectivity (max)	
10%	-9 dBc
15%	-15 dBc
20%	-20 dBc
*Return Loss	10 dBr (min)
Operating Temperature Range	-40 to +85°C
Storage Temperature Range	-55 to +125°C
Moisture Sensitivity Level (MSL)	3
Dimensions (L x W x H)	0.47 x 0.39 x 0.25 inches 12.0 x 10.0 x 6.4 mm

* Measured over $\pm 0.5\text{MHz}$

Mechanical



RECOMMENDED LAYOUT PATTERN



PIN DESIGNATORS	
PIN NUMBER	DESCRIPTION
1	INPUT
2	GND
3	GND
4	GND
5	OUTPUT
6	GND
7	GND
8	GND

NOTES:

1. TOLERANCES ± 0.010 [0.25] UNLESS OTHERWISE SPECIFIED.
2. DIMENSIONS ARE INCHES [mm].

Environmental Specification Standards

Temperature:

- High temperature shall meet MIL-STD-810E, Method 501.3, Procedure I to 125°C storage, and procedure II to 85°C operating.
- Low temperature shall meet Method 502.3, Procedure I to -57°C storage, and Procedure II to -40°C operating.

Vibration:

- MIL-STD-810E Method 514.4

Shock:

- MIL-STD-810E Procedure VI, Method 516.4

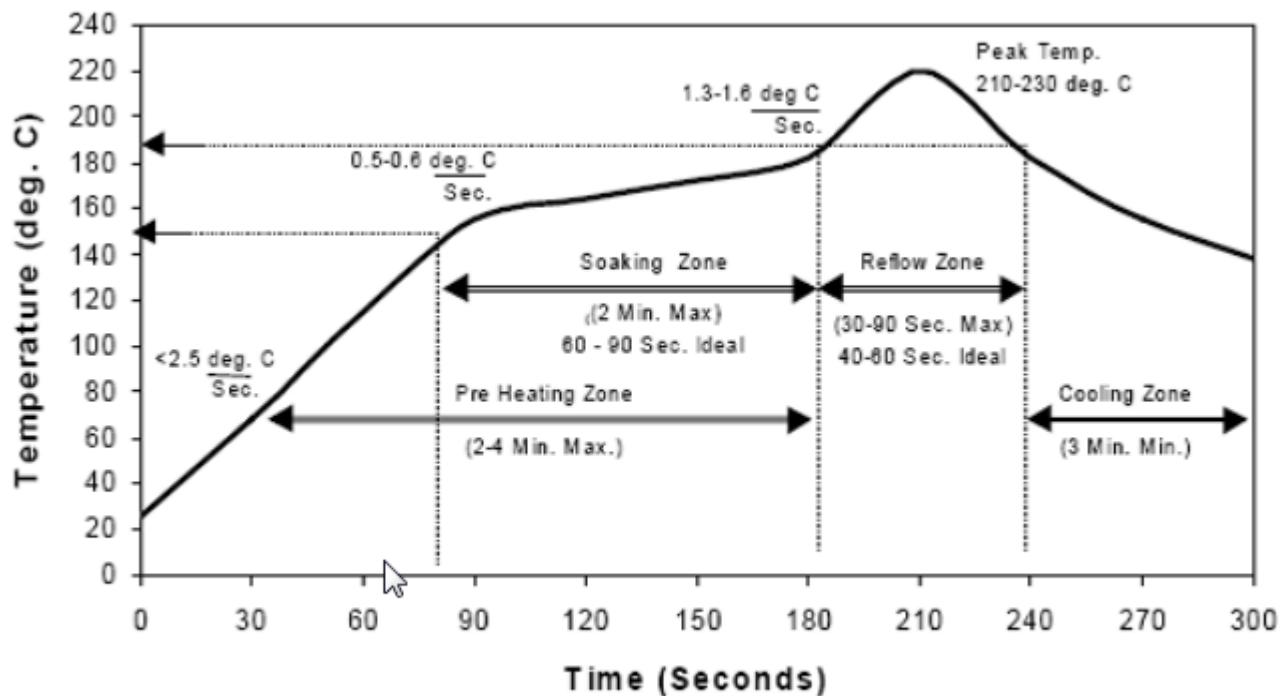
Solder Reflow:

- 230°C [max] for 30 seconds [max]

Leak Testing:

- Units leak tested per MIL-STD 202G Method 112 Test Condition D

Recommended Solder Profile



Ordering Information

Model Number	(-)	Bandwidth	(-)	Options	Add "-EB" for Unit Mounted on Evaluation Board	
3615	(-)	4.5	(-)		(-)	EB

Options:

A:
B:
C:

Available Bandwidths

*Options available upon request

Center Frequency	40 MHz		
3dB Bandwidth	3%	4.5%	TBD
Selectivity 10% (Max)	-13 dBc	-9 dBc	TBD
Selectivity 15% (Max)	-20 dBc	-15 dBc	TBD
Selectivity 20% (Max)	-25 dBc	-20 dBc	TBD
*Insertion Loss	3.0 dB	2.5 dB	TBD
*Return Loss	12 dBr (min)	10 dBr (min)	TBD

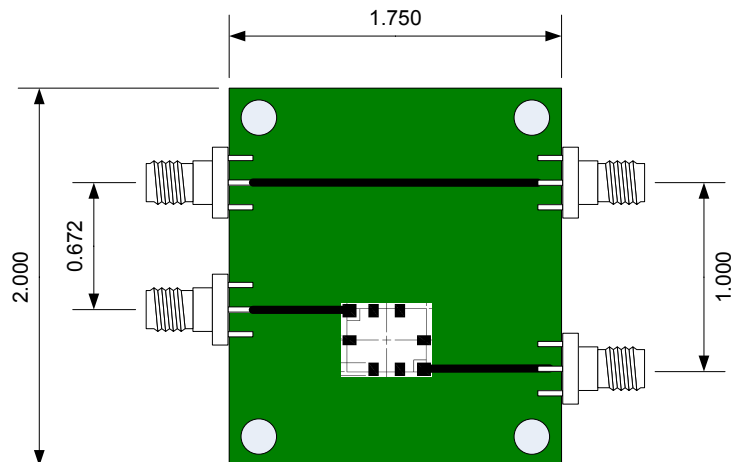
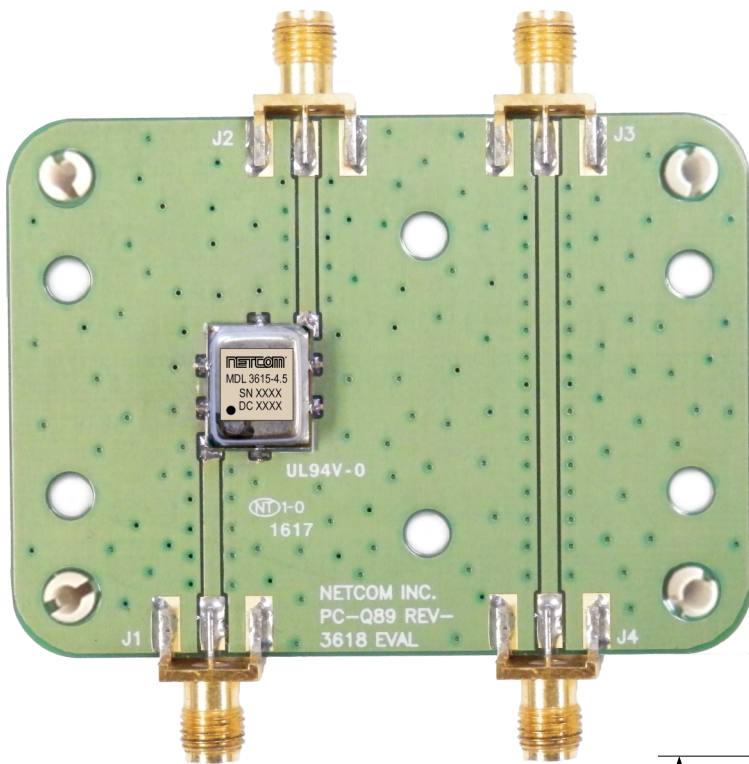
* Measured over $\pm 0.5\text{MHz}$

Corresponding Evaluation Board

Netcom's LC Filter Family are LC bandpass filters with center frequency ranges from 40 to 160MHz.

The EB3618 Evaluation Board is designed to test and evaluate Netcom's LC Filter Family series. The evaluation board can also be used with any Netcom filter up to 100MHz, which meets the pad layout configuration.

The 3618 Evaluation Board includes a separate built-in RF thru path for calibration. The board is designed to withstand a temperature range of -55°C to +125°C.





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