

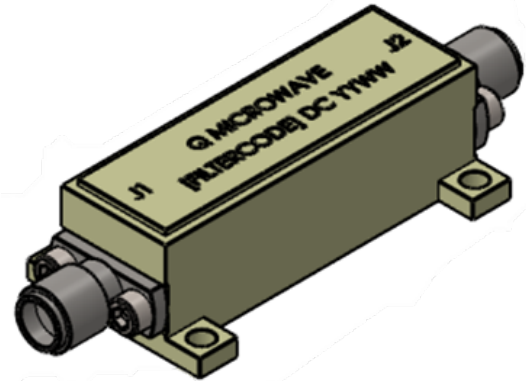


## Features

- Anti-Aliasing
- Low Insertion Loss
- Rugged Design

## Applications

- Anti-Aliasing Filter
- Communications
- EW Applications



## Product Overview

The QLB002-CSMA is a 50 $\Omega$  bandpass filter in a rugged connectorized package. With close in rejections this filter acts as a brick wall, perfect for signal conditioning before any analog to digital converter. With low insertion loss you will see minimal impact to noise figure while reducing unwanted noise outside the band of interest.

## Electrical Specifications @ 25°C

Over Temperature information available when requested

## Characteristic Impedance 50 $\Omega$

| Parameter                          | Frequency (MHz) | Min. | Typ. | Max. | Units |
|------------------------------------|-----------------|------|------|------|-------|
| Insertion Loss<br>Passband         | 900-1400        |      | 1.55 | 1.7  | dB    |
| Insertion Loss<br>Center Frequency | 1150            |      | 0.7  | 0.85 | dB    |
| Return Loss                        | 900-1400        | 12   | 14   |      | dB    |
| Lower Rejection<br>Stop Band       | 10-800          | 45   | 50   |      | dBc   |
| Upper Rejection<br>Stop Band       | 1560-10000      | 45   | 50   |      | dBc   |

\*Contact Factory if additional parameters are required such as: Ripple, Phase Linearity, Group Delay, etc.





## Absolute Maximum Ratings

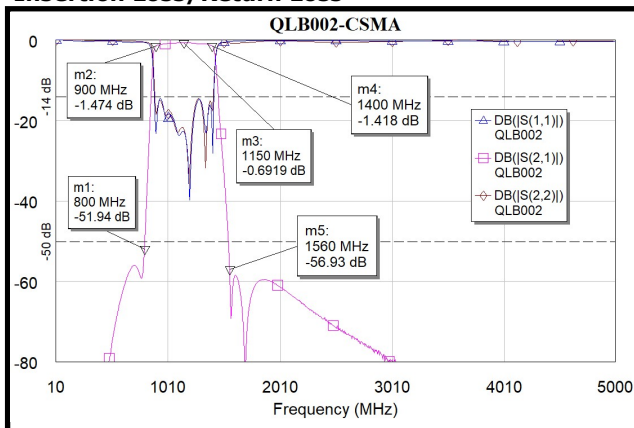
Permanent Damage may occur if any of these limits are exceeded

| Parameter             | Ratings        |
|-----------------------|----------------|
| Operating Temperature | -40°C to +85°C |
| Storage Temperature   | -65°C to +90°C |
| Input Power           | 1 Watt         |

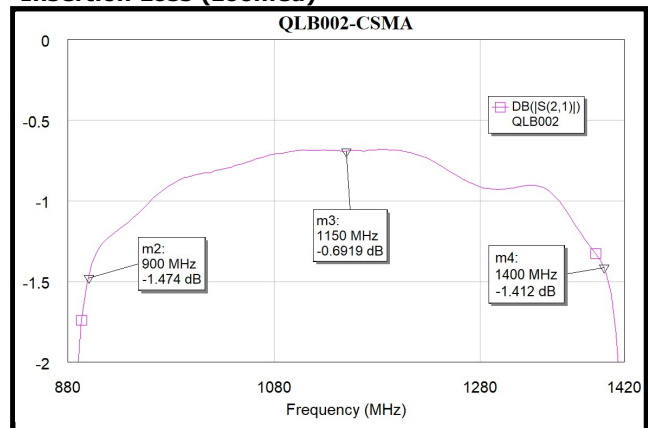
## Typical Performance Graphs @ 25°C

Performance may be simulated contact factory for details or associated S-Parameter files.

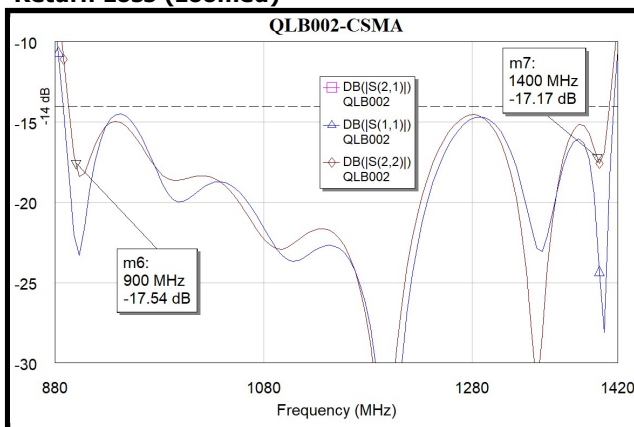
### Insertion Loss/Return Loss



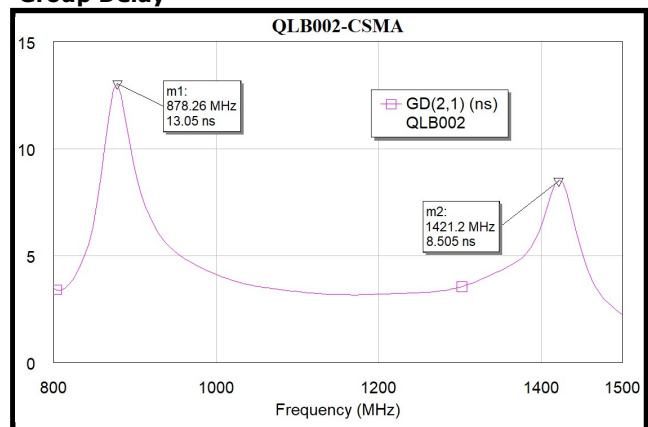
### Insertion Loss (zoomed)



### Return Loss (zoomed)



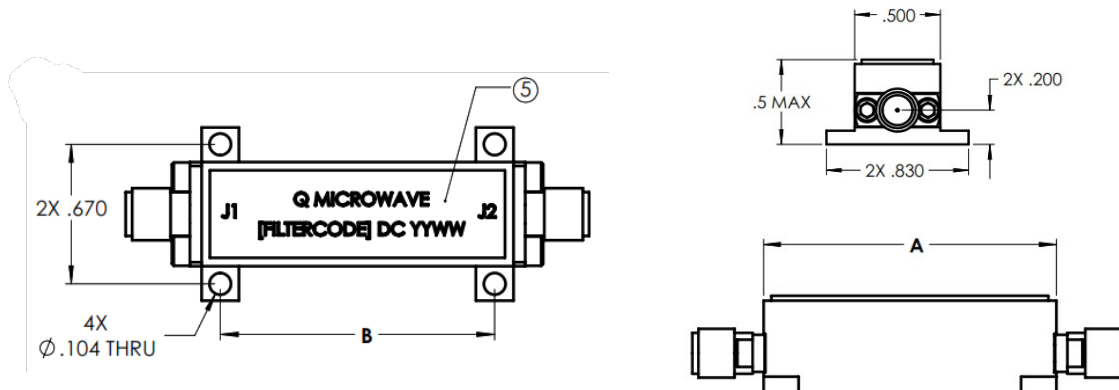
### Group Delay





## Mechanical Detail

|                        |  |
|------------------------|--|
| <b>1) Material</b>     | HOUSING: ALUMINUM, 6061-T6 ; COVER: ALUMINUM, 4047   |
| <b>2) Finish</b>       | CHEMICAL CONVERSION COATING, PER MILDTL-5541, CLASS 1A (YELLOW)  |
| <b>3) Hermeticity</b>  | LASER SEALED HERMETIC PACKAGE. GROSS LEAK LEVEL PER MIL-STD-202 M112, COND D. FINE LEAK LEVEL PER MIL-STD-202 M112, COND C, MAX $1 \times 10^{-6}$ |
| <b>4) Input/Output</b> | FIELD REPLACEABLE SMA (F), FINISH PASSIVATED STAINLESS STEEL.  |
| <b>5) Marking</b>      | LASERMARK APPROXIMATELY AS SHOWN   |
| <b>6) Package</b>      | 901537-2   |



| Package Number | DIM "A"<br>(Inches) | DIM "B"<br>(Inches) | Max Weight<br>(grams) |
|----------------|---------------------|---------------------|-----------------------|
| 901537-1       | 1.500               | 1.320               | 18.5                  |
| 901537-2       | 2.000               | 1.820               | 23                    |
| 901537-3       | 2.500               | 2.320               | 27.5                  |

### Important Notice

The information contained herein is believed to be reliable; however, Q Microwave makes no warranties regarding the information contained herein and assumes no responsibility or liability whatsoever for the use of the information contained herein. All information contained herein is subject to change without notice. Customers should obtain and verify the latest relevant information before placing orders for Q Microwave products. The information contained herein, or any use of such information does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other intellectual property rights, whether with regard to such information itself or anything described by such information.

THIS INFORMATION DOES NOT CONSTITUTE A WARRANTY WITH RESPECT TO THE PRODUCTS DESCRIBED HEREIN, AND Q MICROWAVE, INC. HEREBY DISCLAIMS ANY AND ALL WARRANTIES WITH RESPECT TO SUCH PRODUCTS WHETHER EXPRESS OR IMPLIED BY LAW, COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE OR OTHERWISE, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Q Microwave, Inc. products are not warranted or authorized for use as critical components in medical, life-saving, or life sustaining applications, or other applications where a failure would reasonably be expected to cause severe personal injury or death.

Q Microwave's Standard Terms & Conditions Apply (Unless Otherwise Specified): [www.qmicrowave.com/sales](http://www.qmicrowave.com/sales)

