

# High Frequency Ceramic Solutions

**Low Pass Filter, 2.4GHz. Mini EIA 0402, SMD low loss for Bluetooth (BLE), IoT, WiFi, V2X, Wearables, ISM, etc.**

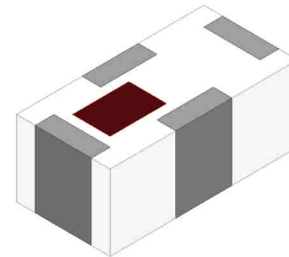
**1/N 2450LP07C0100**

Detail Specification: 11/15/2017

Page 1 of 3

Automotive AEC-Q200 available by request:

| General Specifications                                       |                                         |
|--------------------------------------------------------------|-----------------------------------------|
| Frequency (MHz)                                              | 2400 - 2500                             |
| Insertion Loss (dB)                                          | 0.4 typ (0.6max @25C, 0.7max @-40to+85) |
| Return Loss (dB)                                             | 11 typ. (9.5 min.)                      |
| Attenuation (dB)                                             | 34 dB @ 2 x fo                          |
| Attenuation (dB)                                             | 35 dB @ 3 x fo                          |
| Power Capacity (W)                                           | 3W max. (CW)                            |
| Operating Temperature                                        | -40 to +85°C                            |
| Storage Temperature                                          | -40 to +85°C                            |
| Recommended Storage Conditions (unused product still in T&R) | +5 ~ +35 °C, Humidity 45~75%RH          |

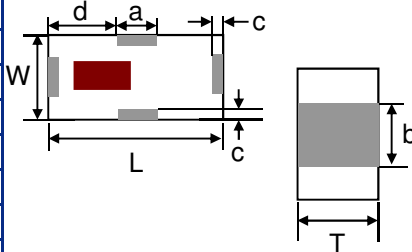


## Part Number Explanation

| P/N Suffix | Packing Style                | Bulk             | Suffix = S                           | 2450LP07C0100S                        |
|------------|------------------------------|------------------|--------------------------------------|---------------------------------------|
|            |                              | T & R (10K/reel) | Suffix = T                           | 2450LP07C0100T (Reel Size: 10,000pcs) |
|            | Termination style            | 100% Tin         | Suffix = None                        | 2450LP07C0100(T or S)                 |
|            | 50Ω SMA Connector Eval Board |                  | 2450LP07C0100-EB1SMA (orderable p/n) |                                       |

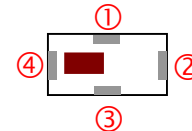
## Mechanical Dimensions

|   | In            | mm          |
|---|---------------|-------------|
| L | 0.039 ± 0.002 | 1.00 ± 0.05 |
| W | 0.020 ± 0.002 | 0.50 ± 0.05 |
| T | 0.016 max.    | 0.40 max.   |
| a | 0.012 ± 0.004 | 0.30 ± 0.10 |
| b | 0.012 ± 0.004 | 0.30 ± 0.10 |
| c | 0.004 ± 0.002 | 0.10 ± 0.05 |
| d | 0.014 ± 0.004 | 0.35 ± 0.10 |

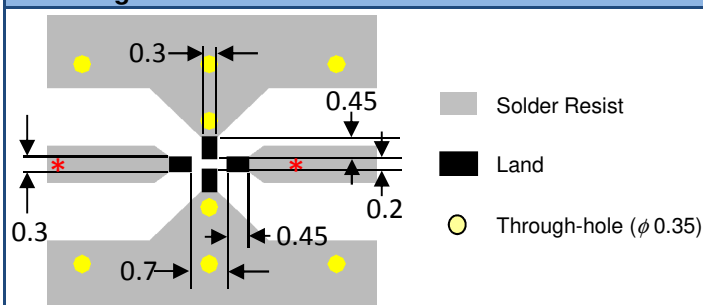


## Terminal Configuration

|   |        |
|---|--------|
| 1 | GND    |
| 2 | IN/OUT |
| 3 | GND    |
| 4 | IN/OUT |



## Mounting Considerations



\*Trace must be designed to a 50Ω characteristic impedance based on PCB material and thickness.

Want the layout file or need us to revise your layout (free!) to make sure is correct? Send us a message at:

[www.johansontechnology.com/ask-a-question](http://www.johansontechnology.com/ask-a-question)

Johanson Technology, Inc. reserves the right to make design changes without notice.

All sales are subject to Johanson Technology, Inc. terms and conditions.



4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

Ver. 1.0

2017 Johanson Technology, Inc. All Rights Reserved

# High Frequency Ceramic Solutions

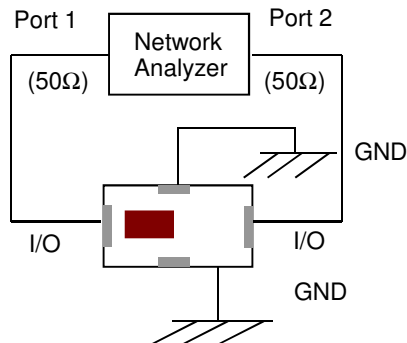
**Low Pass Filter, 2.4GHz. Mini EIA 0402, SMD low loss for Bluetooth (BLE), IoT, WiFi, V2X, Wearables, ISM, etc.**

**1/N 2450LP07C0100**

Detail Specification: 11/15/2017

Page 2 of 3

## Measuring Diagram

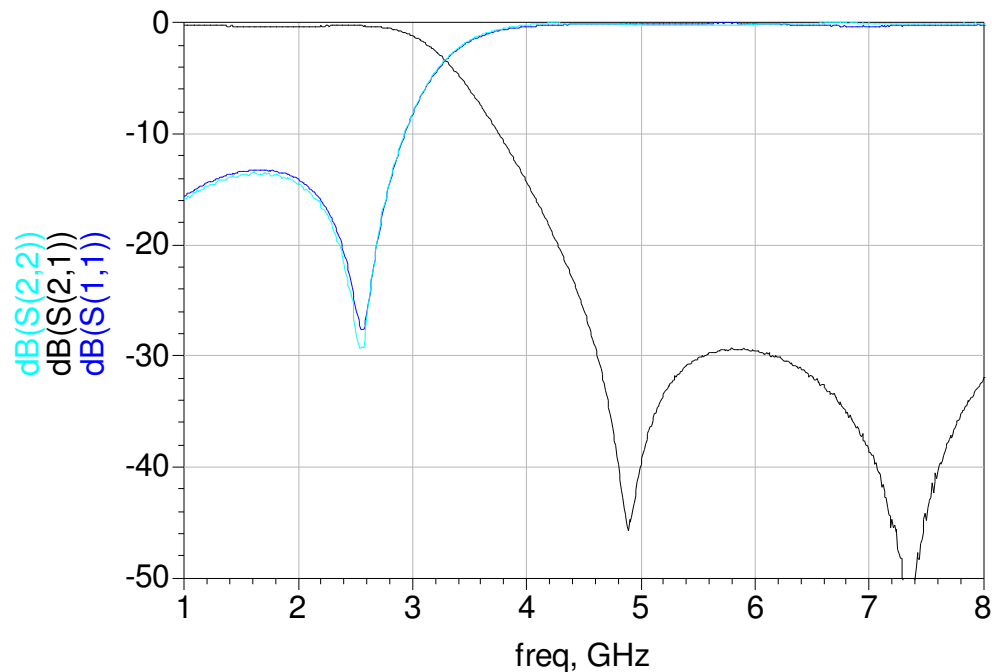


Click here Order the SMA-ready Evaluation Board with this filter mounted, p/n is: 2450LP07C0100-EB1SMA

[www.johansontechnology.com/request-a-](http://www.johansontechnology.com/request-a-)

## Typical Electrical Performance (T=25°C)

### Insertion Loss & Attenuation



Johanson Technology, Inc. reserves the right to make design changes without notice.  
All sales are subject to Johanson Technology, Inc. terms and conditions.



[www.johansontechnology.com](http://www.johansontechnology.com)  
4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821  
Ver. 1.0 2017 Johanson Technology, Inc. All Rights Reserved

# High Frequency Ceramic Solutions

**Low Pass Filter, 2.4GHz. Mini EIA 0402, SMD low loss for Bluetooth (BLE), IoT, WiFi, V2X, Wearables, ISM, etc.**

**1/N 2450LP07C0100**

Detail Specification: 11/15/2017

Page 3 of 3

## Low-pass Filters

[www.johansontechnology.com/low-pass-filters](http://www.johansontechnology.com/low-pass-filters)

## Packaging Information

[www.johansontechnology.com/tape-reel-packaging](http://www.johansontechnology.com/tape-reel-packaging)

## Soldering Information

[www.johansontechnology.com/typical-soldering-profile](http://www.johansontechnology.com/typical-soldering-profile)

## RoHS Compliance

[www.johansontechnology.com/rohs-compliance](http://www.johansontechnology.com/rohs-compliance)

## MSL Info

[www.johansontechnology.com/msl-rating](http://www.johansontechnology.com/msl-rating)

## To Download Measured S-parameters for Evaluation and Simulation:

[www.johansontechnology.com/low-pass-filters](http://www.johansontechnology.com/low-pass-filters)

## For layout review contact our Applications Team at:

[www.johansontechnology.com/ask-a-question](http://www.johansontechnology.com/ask-a-question)

Johanson Technology, Inc. reserves the right to make design changes without notice.  
All sales are subject to Johanson Technology, Inc. terms and conditions.



[www.johansontechnology.com](http://www.johansontechnology.com)  
4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821  
Ver. 1.0 2017 Johanson Technology, Inc. All Rights Reserved