

Features

- 75 Ohm
- SMT unit
- RoHS Compliant

Description

- M/A-COM Technology Solutions's MAFL-010101-CB0AD0 is a surface mount Band-Pass Filter unit designed for MoCA applications.

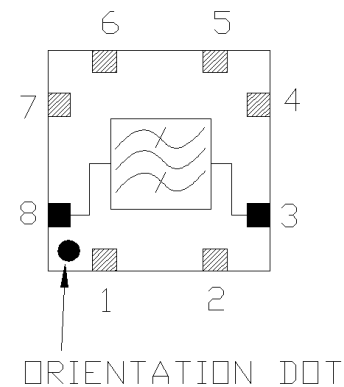
Product Image



Pin Configuration

Function	Pin Number
Input Port	8
Band-Pass Port	3
Ground	1, 2, 4 - 7
Not connected	-

Functional Schematic



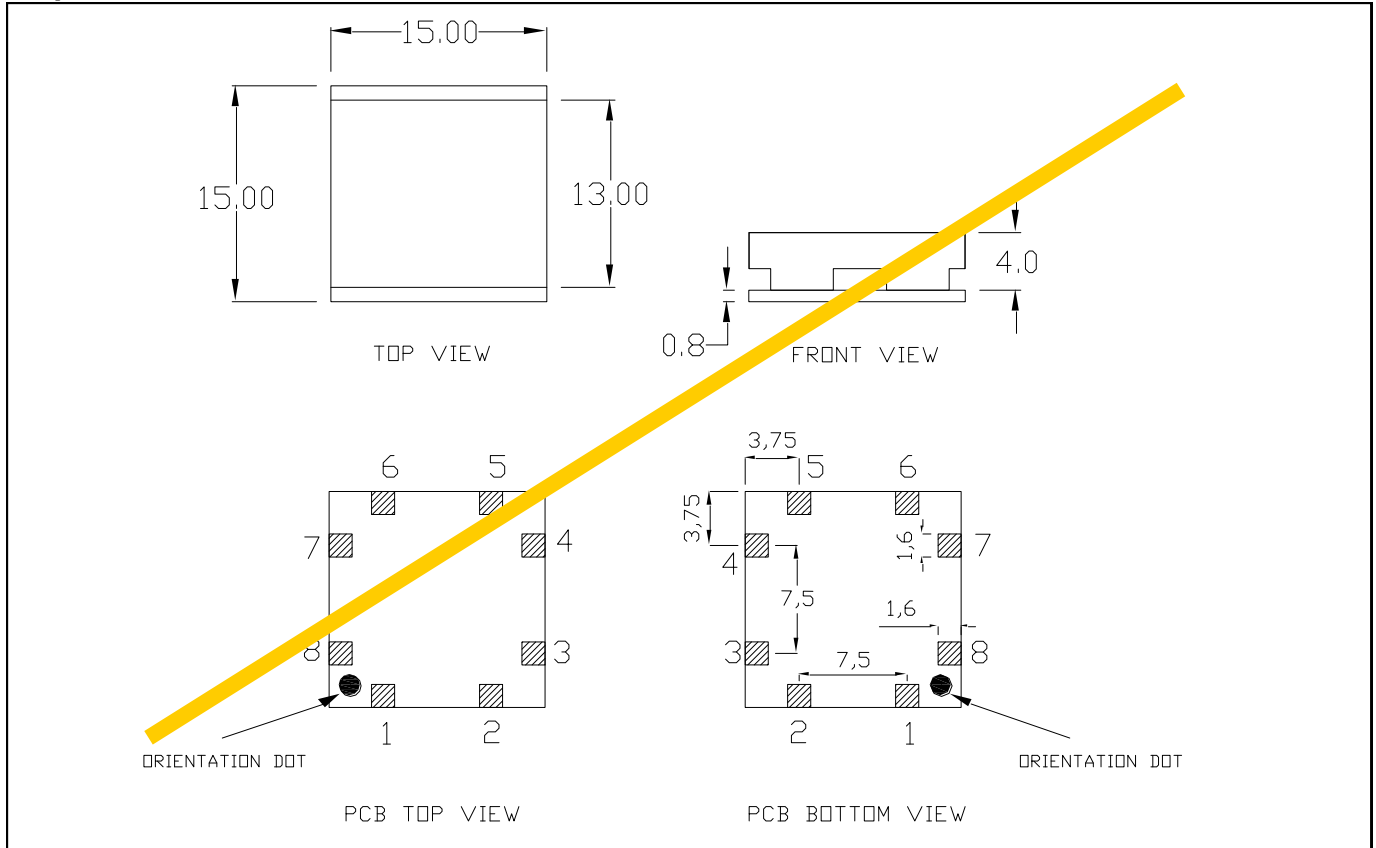
Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$, $P_{in} = 0\text{dBm}$

Parameter	Units	Typ	Min	Max
Insertion Loss 1125 - 1550 MHz	dB	1.7	-	2.0
Stop band Rejection				
5 - 800 MHz	dB	43	40	-
800 - 1002 MHz	dB	40	37	-
2250 - 2400 MHz	dB	33	30	-
2400 - 2600 MHz	dB	36	18	-
2600 - 3000 MHz	dB	36	10	-
Input Port Return Loss				
1125 - 1200 MHz	dB	14	12	-
1200 - 1550 MHz	dB	13	11	-

Recommended Maximum

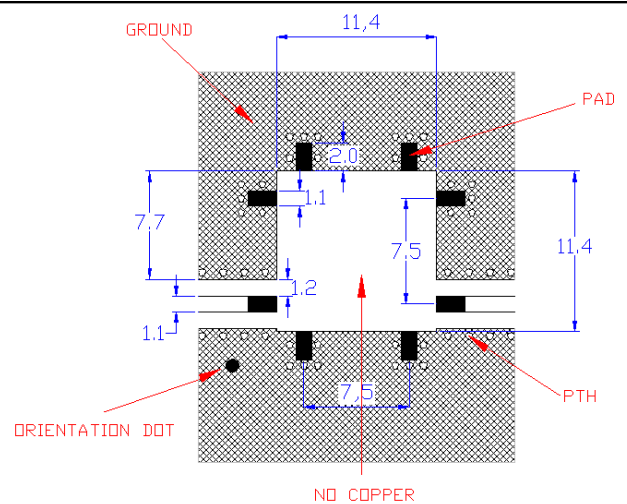
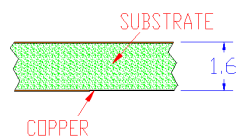
Parameter	Value
Storage Temperature	-40°C to +85°C
Operating Temperature	-40°C to +85°C
DC Current	30mA
RF Power	250mW

Component Dimensions



Recommended PCB Configuration

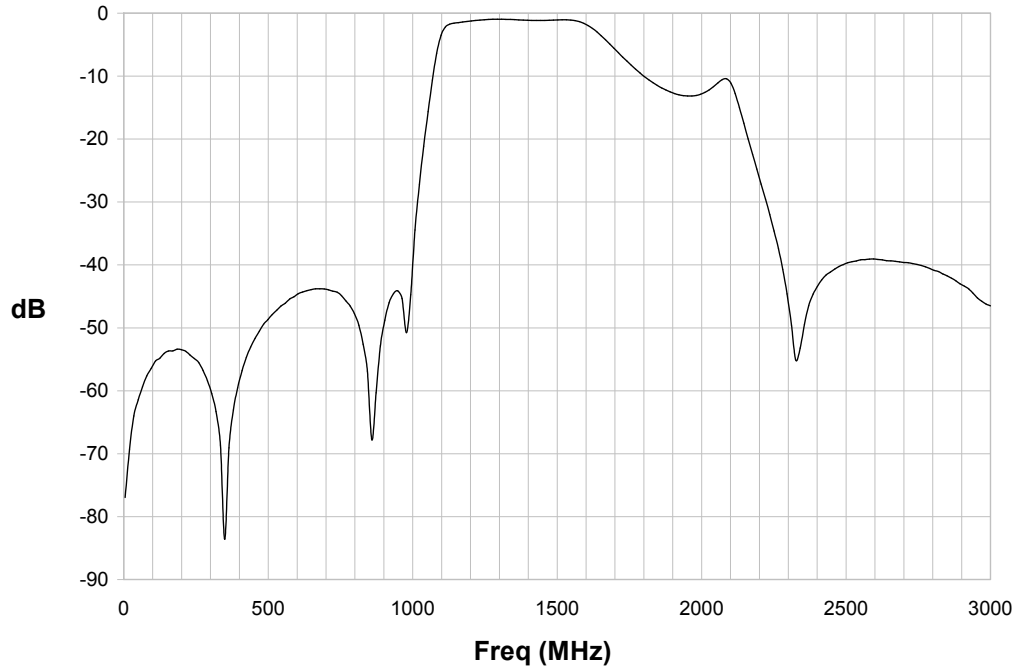
- Track dimension = 1.1mm
- Gap dimension = 1.2mm
- It is not recommended to run tracks under the filter unless they are greater than 1.6mm below the base.
- Ground should be 1.6mm below the base of the filter
- Area directly under the filter should be free from copper



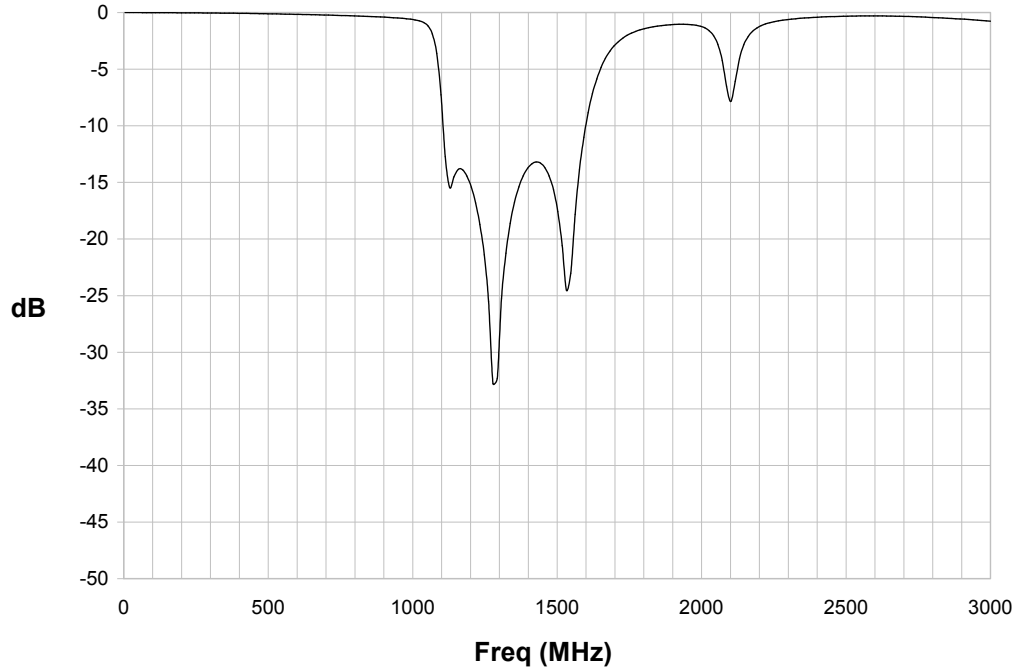
* Dimensions are millimeters ± 0.1 unless otherwise specified.

Typical Performance Curves: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$, $P_{in} = 0\text{dBm}$

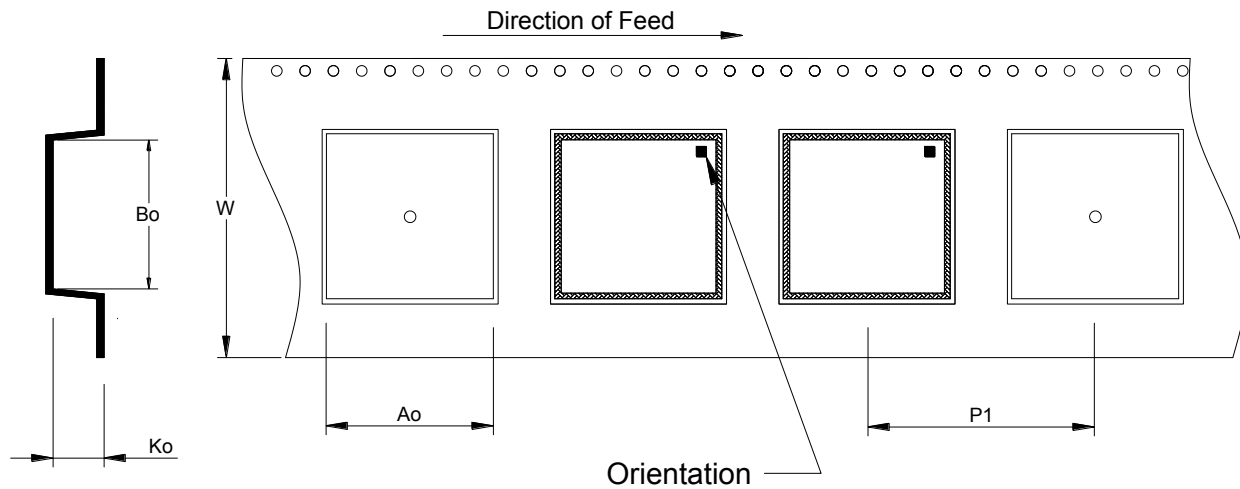
Insertion Loss



Return Loss



Tape & Reel Information



Item	Dimension
Ao	15.40mm +/- 0.1mm
Bo	15.40mm +/- 0.1mm
Ko	5.40mm +/- 0.1mm
W	32.00mm +/- 0.3mm
P1	20.00mm +/- 0.1mm

Ordering Information

Part Number	Package
MAFL-010101-CB0AD0	500pcs Reel
MAFL-010101-CB0ATB	Customer Evaluation Board

M/A-COM Technology Solutions Inc. All rights reserved.

Information in this document is provided in connection with M/A-COM Technology Solutions Inc ("MACOM") products. These materials are provided by MACOM as a service to its customers and may be used for informational purposes only. Except as provided in MACOM's Terms and Conditions of Sale for such products or in any separate agreement related to this document, MACOM assumes no liability whatsoever. MACOM assumes no responsibility for errors or omissions in these materials. MACOM may make changes to specifications and product descriptions at any time, without notice. MACOM makes no commitment to update the information and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to its specifications and product descriptions. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document.

THESE MATERIALS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, RELATING TO SALE AND/OR USE OF MACOM PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, CONSEQUENTIAL OR INCIDENTAL DAMAGES, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. MACOM FURTHER DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. MACOM SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS, WHICH MAY RESULT FROM THE USE OF THESE MATERIALS.

MACOM products are not intended for use in medical, lifesaving or life sustaining applications. MACOM customers using or selling MACOM products for use in such applications do so at their own risk and agree to fully indemnify MACOM for any damages resulting from such improper use or sale.