

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.

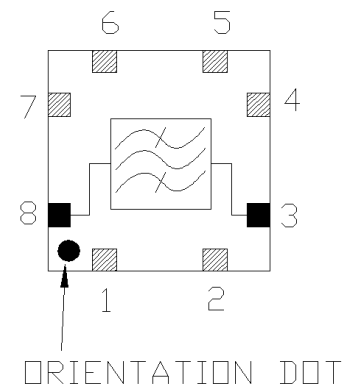
Product Image



Pin Configuration

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

Functional Schematic



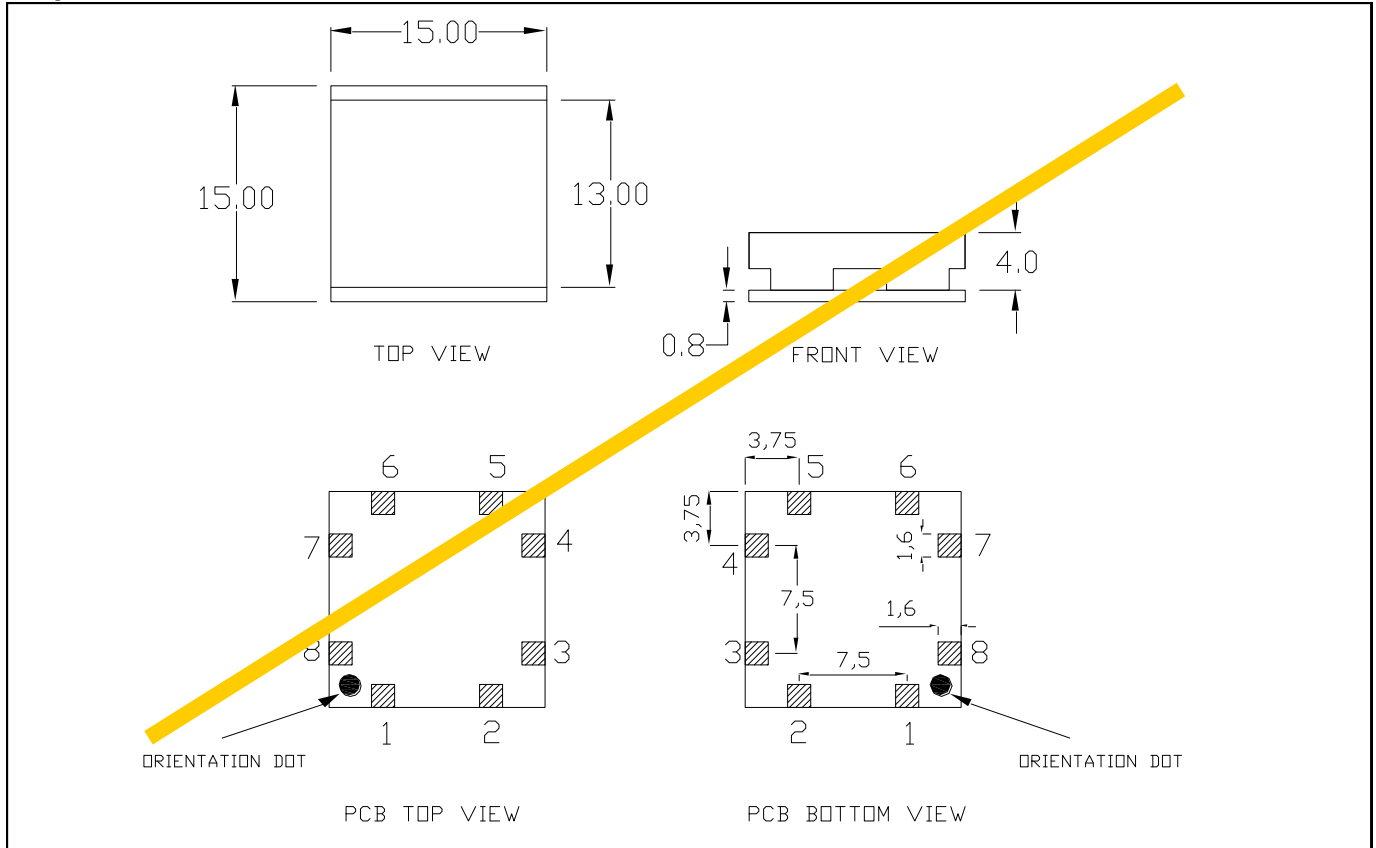
Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$, $P_{in} = 0\text{dBm}$

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

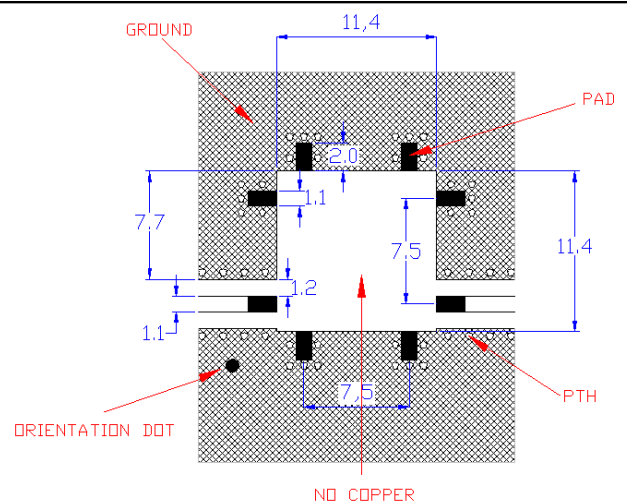
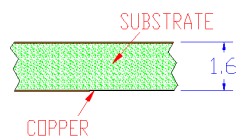
Parameter	Value
Storage Temperature	-40°C to +85°C
Operating Temperature	-40°C to +85°C
DC Current	30mA
RF Power	250mW

Component Dimensions



Recommended PCB Configuration

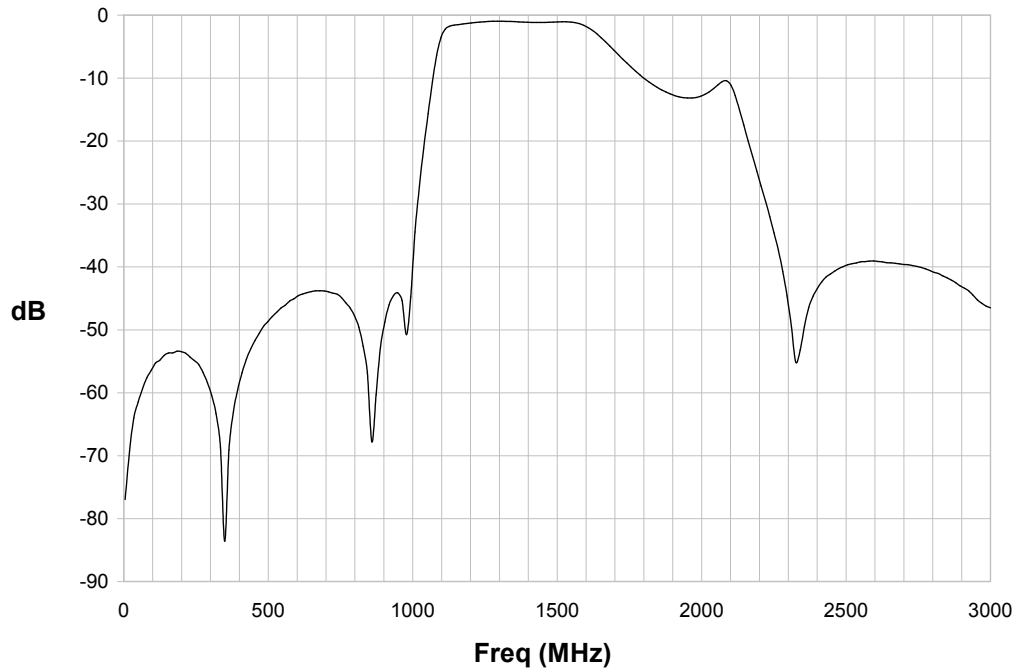
- Track dimension = 1.1mm
- Gap dimension = 1.2mm
- It is not recommended to run tracks under the filter unless they are greater than 1.6mm below the base.
- Ground should be 1.6mm below the base of the filter
- Area directly under the filter should be free from copper



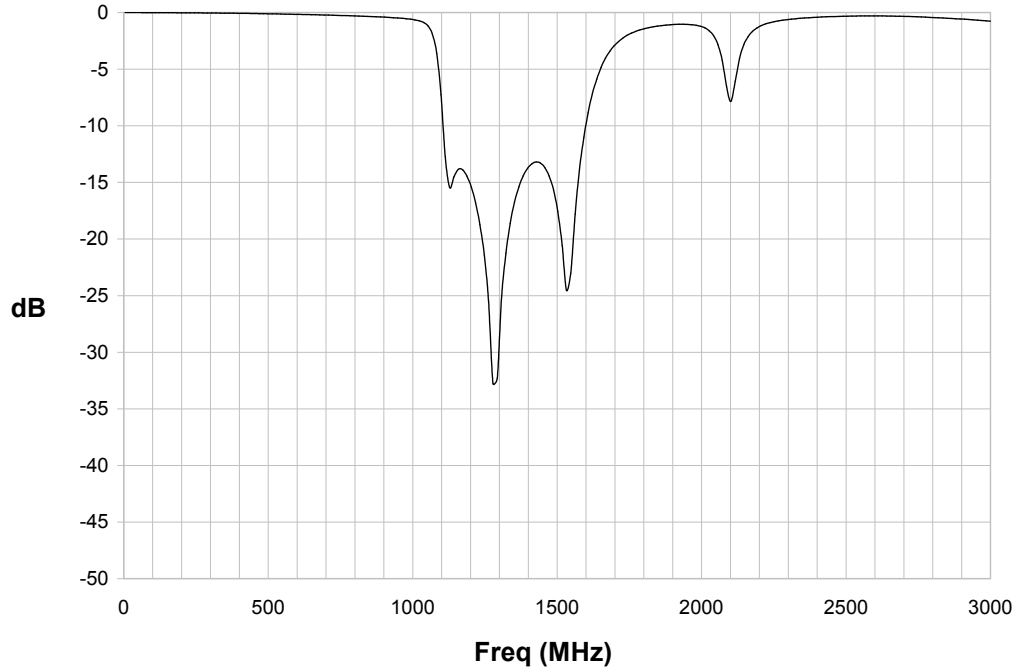
* Dimensions are millimeters ± 0.1 unless otherwise specified.

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

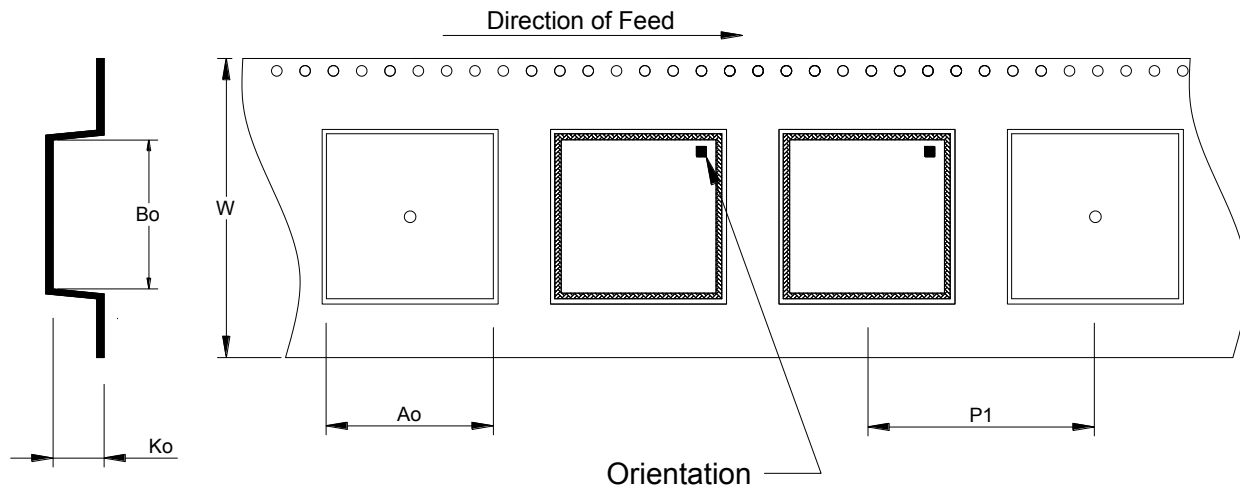
Insertion Loss



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

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