

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.

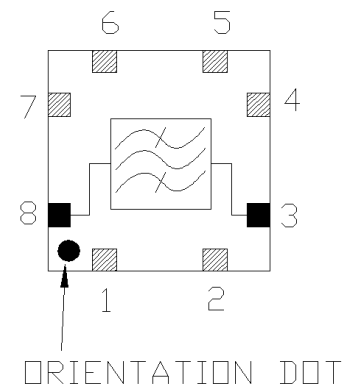
Product Image



Pin Configuration

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

Functional Schematic



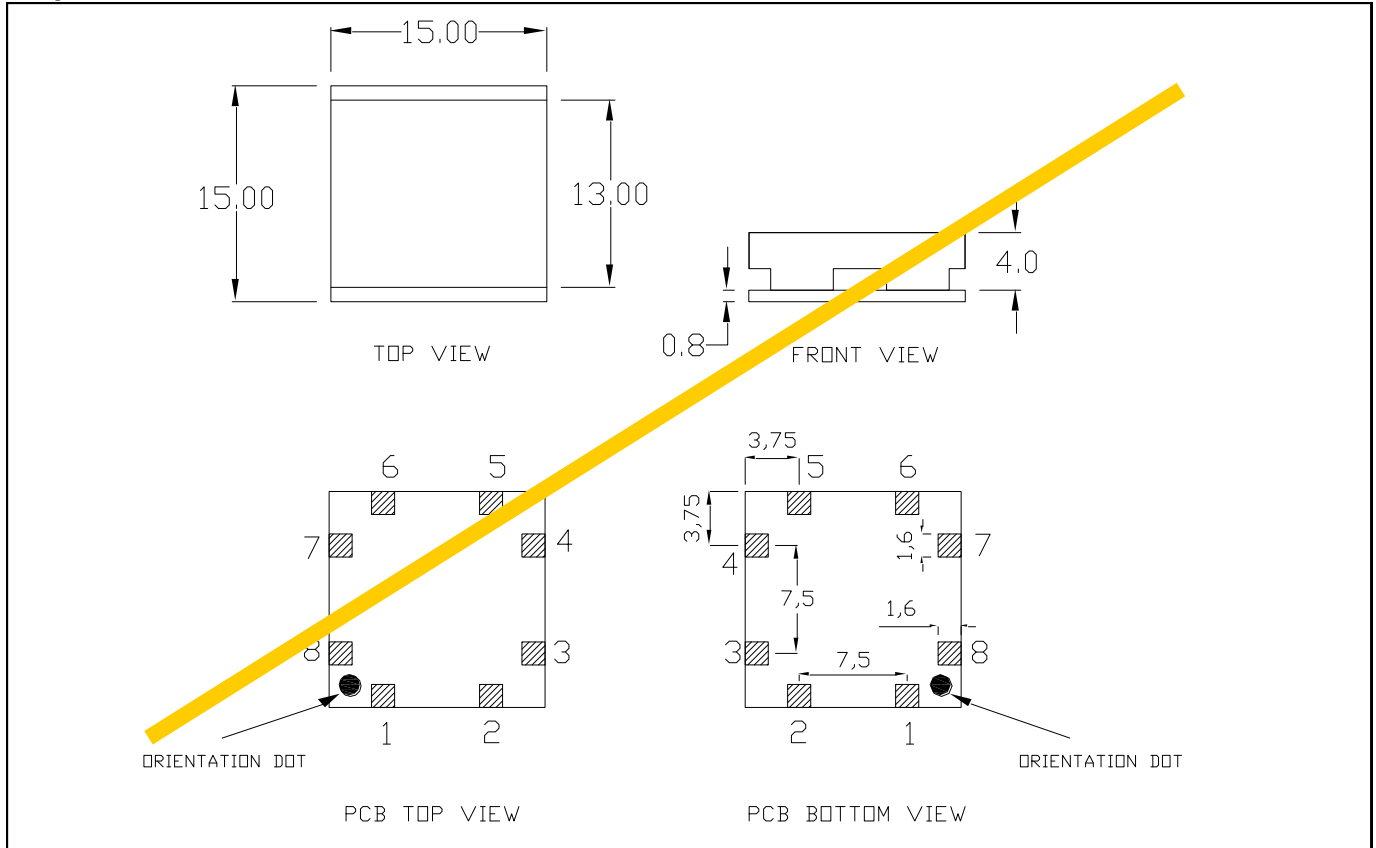
Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$, $P_{in} = 0\text{dBm}$

| 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

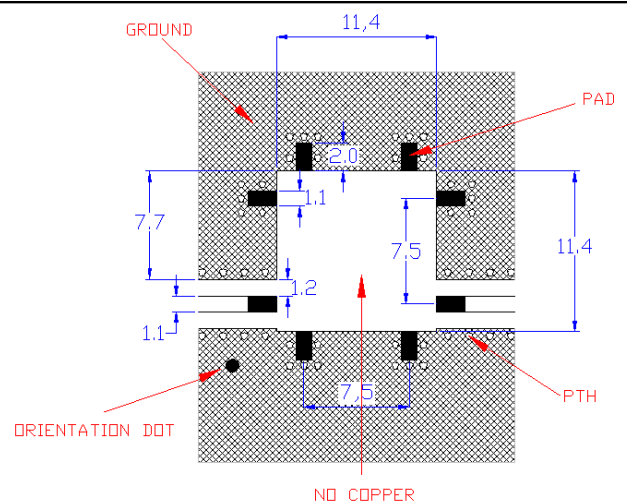
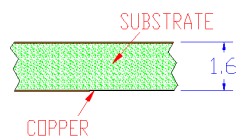
| Parameter | Value |
|-----------------------|----------------|
| Storage Temperature | -40°C to +85°C |
| Operating Temperature | -40°C to +85°C |
| DC Current | 30mA |
| RF Power | 250mW |

Component Dimensions



Recommended PCB Configuration

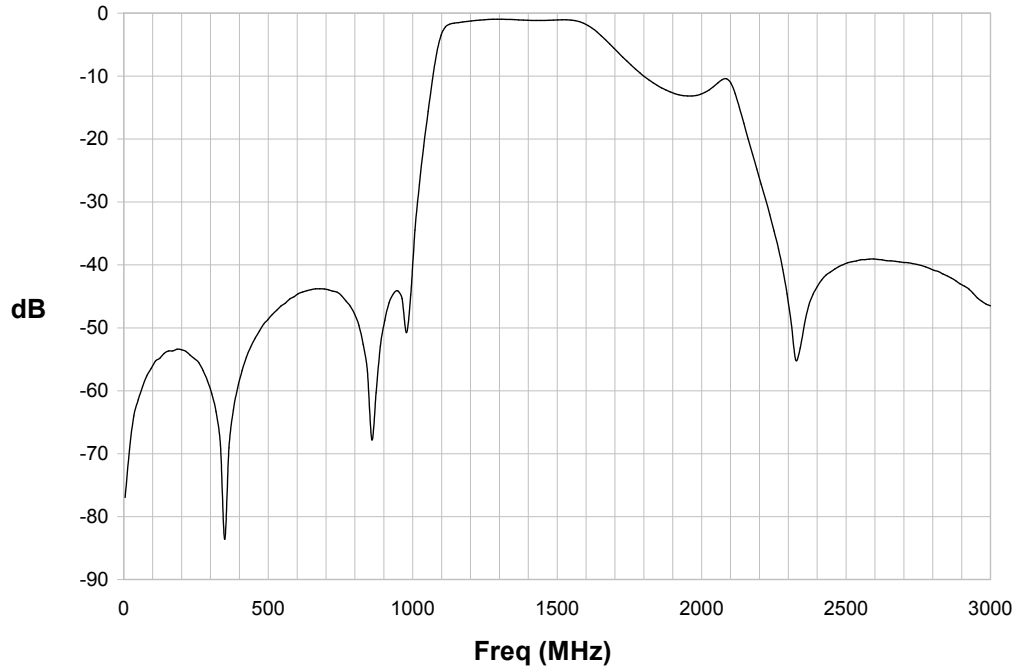
- Track dimension = 1.1mm
- Gap dimension = 1.2mm
- It is not recommended to run tracks under the filter unless they are greater than 1.6mm below the base.
- Ground should be 1.6mm below the base of the filter
- Area directly under the filter should be free from copper



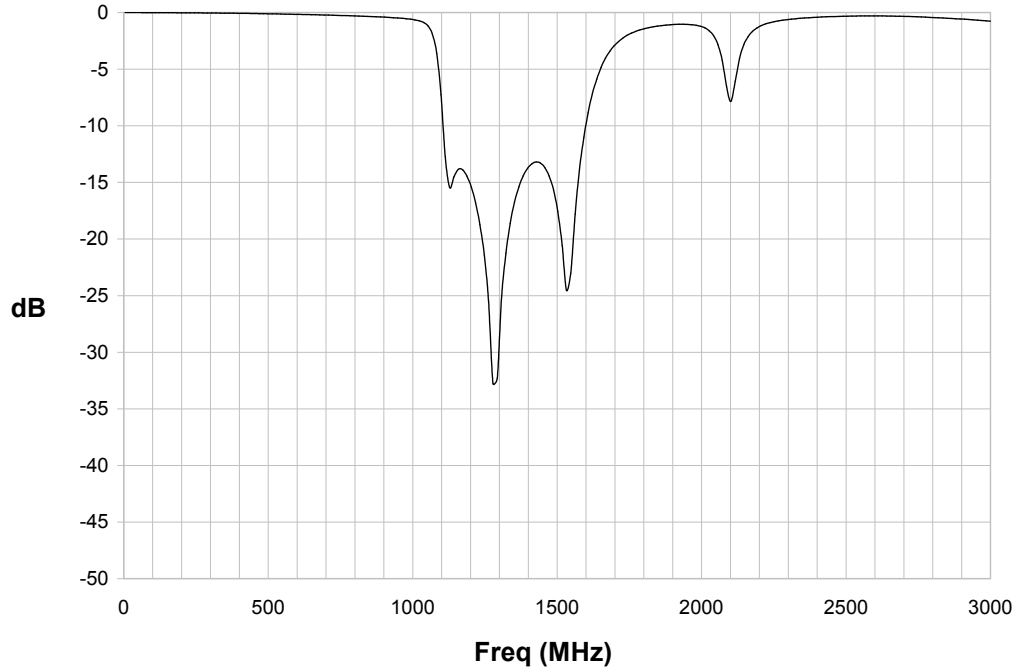
* Dimensions are millimeters ± 0.1 unless otherwise specified.

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

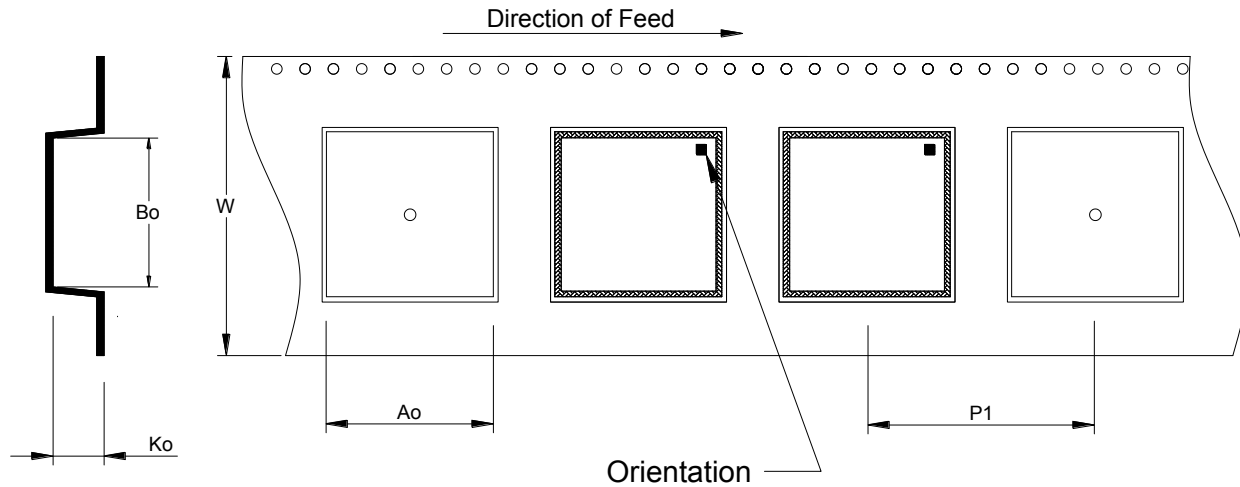
Insertion Loss



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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