

MAFL-010639-CB0AD0



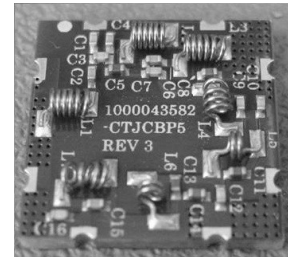
MoCA Band Pass Filter
500 - 3000 MHz

Rev. V5

Features

- Surface Mount
- 75 Ohm
- RoHS* Compliant
- Pb Free
- MoCA Application

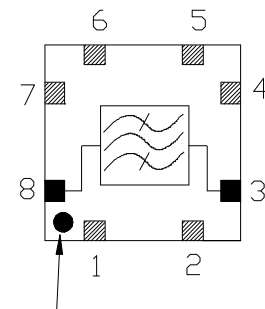
Product Image



Description

M/A-COM Technology Solutions' MAFL-010639-CB0AD0 is a surface mount Band Pass Filter unit designed for MoCA applications.

Functional Schematic



ORIENTATION DOT

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

Parameter	Units	Min	Typ	Max
Common to MoCA / MoCA to Common Rejection				
500 - 565 MHz	dB	-35	-38	-
565 - 575 MHz	dB	-30	-32	-
950 - 960 MHz	dB	-32	-36	-
960 - 1220 MHz	dB	-34	-40	-
1220-2000 MHz	dB	-37	-42	-
2000 - 2500 MHz	dB	-35	-40	-
2600 - 3000 MHz	dB	-30	-33	-
Insertion Loss				
650 - 875 MHz	dB	-	-2.0	-3.0
Common Port Return Loss				
650 - 875 MHz	dB	-9.5	-10	-

Recommended Maximum Ratings

Parameter	Value
Storage Temperature	-40C to +85°C
Operating Temperature	-40C to +85°C
DC Current	30mA
RF Power	+23.9dBm (250mW)
Transient Voltage	200V

Pin Configuration

Function	Pin Number
Common Port (Input)	8
MoCA Port (Output)	3
Ground	1 - 2, 4 - 7
Not connected	-

- Restrictions on Hazardous Substances, European Union Directive 2002/95/EC
- Full temperature plots are available on request.

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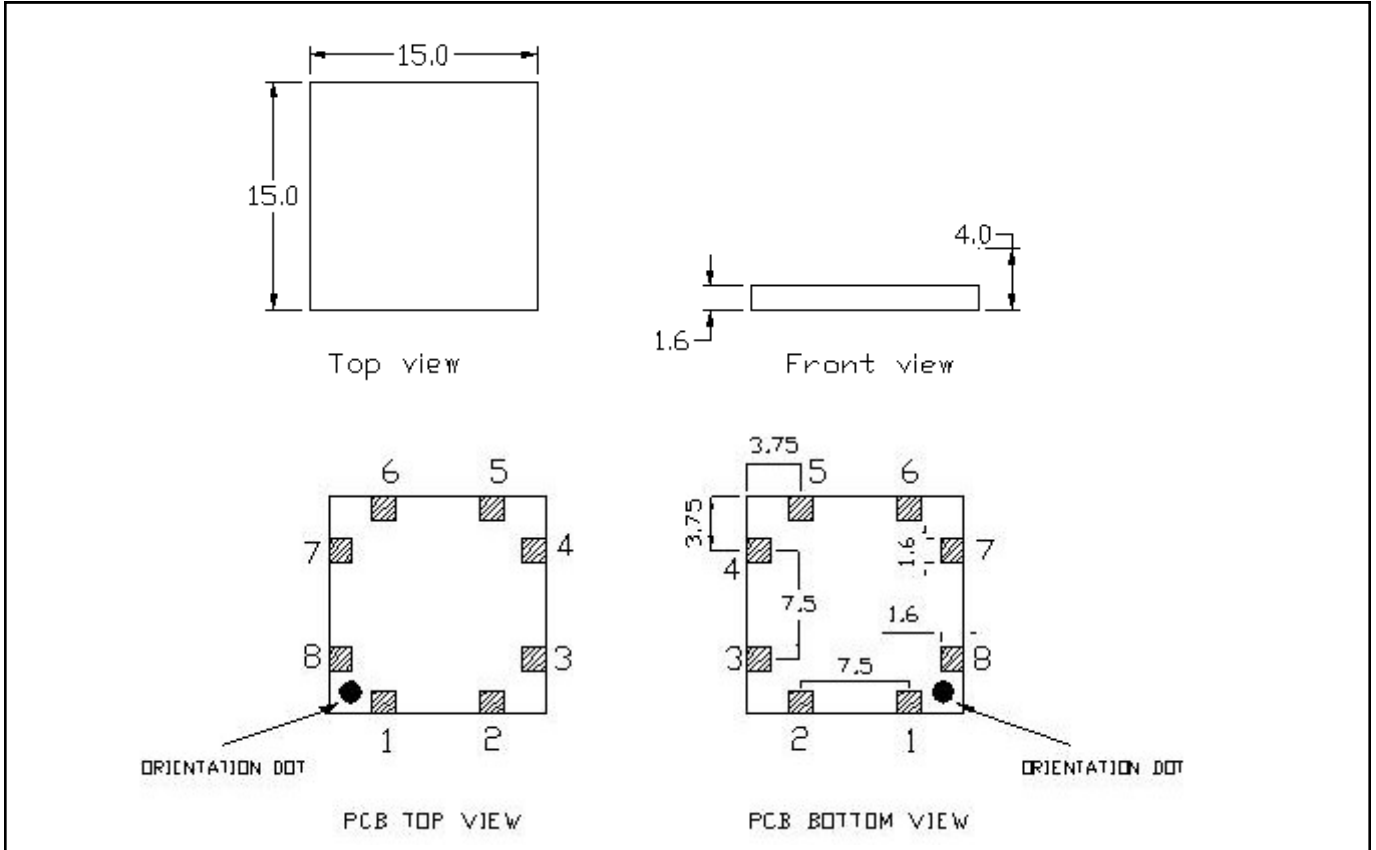
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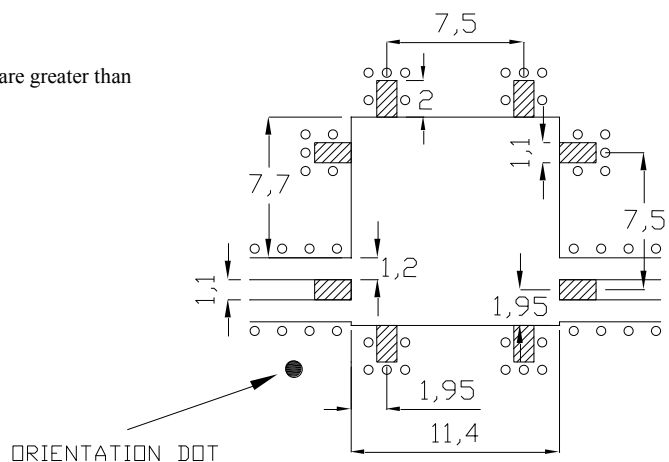
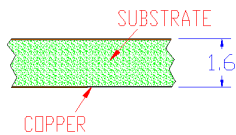
Rev. V5

Outline Drawing:



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
- RF shield should be kept a minimum of 6mm above the filter



1. Dimensions in mm.
2. Tolerance: ± 0.1 mm unless otherwise noted.
3. Model number and lot code printed on reel.
4. Plating finish: ENIG on both sides, 0.05 to 0.1 μ m gold over 3 to 6 μ m nickel

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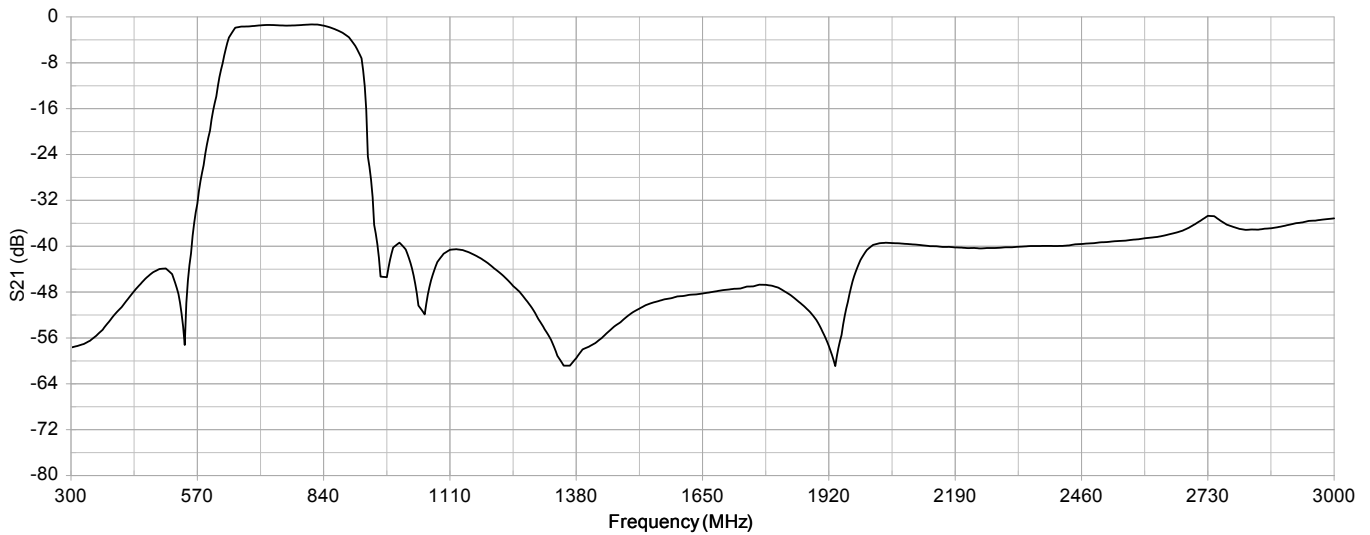


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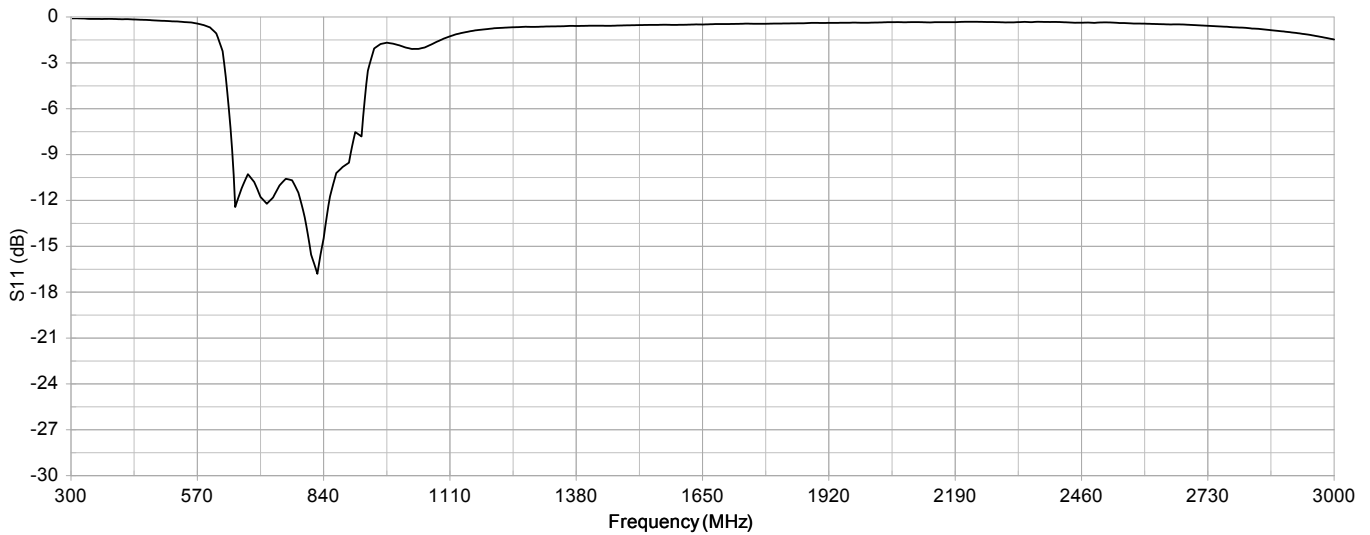
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Typical Performance Curves at +25°C

Insertion Loss



Common Port Return Loss



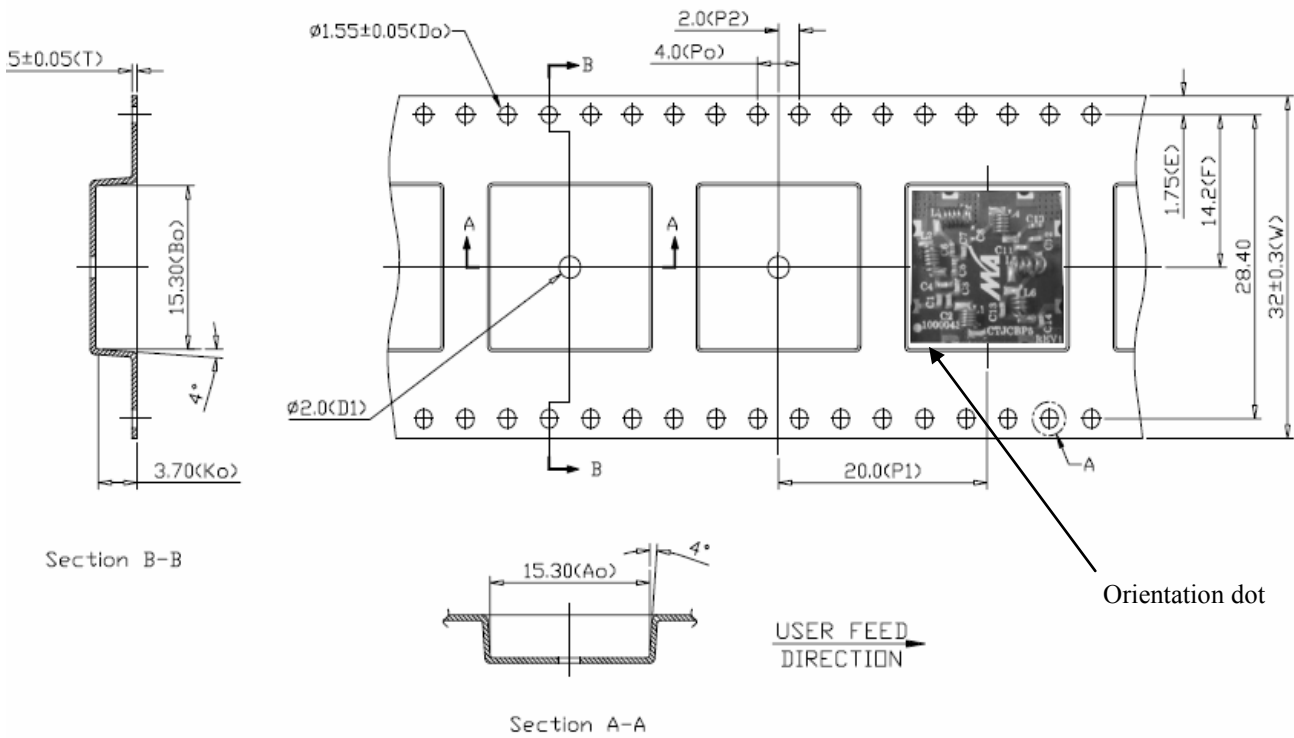
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Tape & Reel Information



Parameter	Units	Value
Qty per reel	-	500
Reel size	mm	330
Tape width (W)	mm	32.0
Pitch (P ₁)	mm	20.0
A ₀	mm	15.3
B ₀	mm	15.3
K ₀	mm	3.70

Ordering Information

Part Number	Description
MAFL-010639-CB0AD0	Tape & Reel
MAFL-010639-CB0ATB	Customer Evaluation Board