MAFL-010140-CT0C60

MoCA Triplex Filter
5 - 2000 MHz

Rev. V3

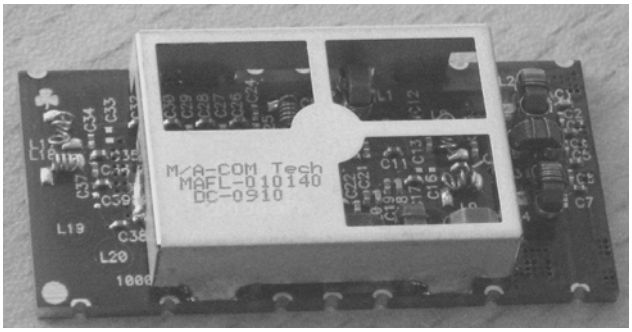
Features

- 75 Ohm
- SMT unit
- RoHS Compliant
- Lead Free

Description

- M/A-COM Technology Solutions's MAFL-010140-CT0C60 is a surface mount Triplex Filter unit designed for MoCA applications.

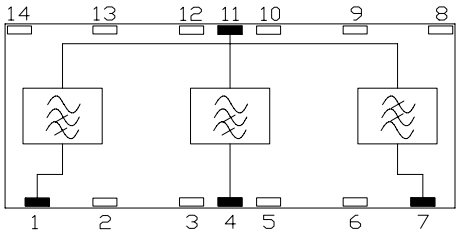
Product Image



Ordering Information

Part Number	Package
MAFL-010140-CT0C60	Tray Qty: 960

Functional Schematic



Pin Configuration

Function	Pin Number
RF IN (Common Port)	11
Return Path Port	7
Forward Path Port	4
MoCA Path Port	1
Ground	2,3,5,6,8,9,10,12,13,14

Electrical Specifications: T_A = 25°C, Z_0 = 75Ω

Parameter	Units	Typ	Min	Max
Input Port Return Loss				
5 - 42MHz	dB	- 15	-12	-
54 - 1002MHz	dB	- 12	-10	-
1125 - 1525 MHz	dB	- 12	-10	-
Reverse Path Filter:				
5 - 42MHz	dB	- 1.2	-	-1.5
54 - 64 MHz	dB	-62	-60	-
64 - 210 MHz	dB	-48	-45	-
210 - 450 MHz	dB	- 40	-37.5	-
450 - 1002 MHz		- 32	-28	-
Forward Path Filter:				
5 - 40MHz	dB	-55	-50	-
40 - 42 MHz	dB	-50	-47.5	-
54 - 88 MHz	dB	-1.5	-	-2.0
88 - 800 MHz	dB	-1.0	-	-1.5
800 - 1002 MHz	dB	-2.0	-	-2.5
1125 - 1200 MHz	dB	-40	-37	-
1200 - 1400 MHz	dB	-28	-26	-
1400 - 1500 MHz	dB	-37	-33	-
1500 - 2000 MHz	dB	-30	-26	-
MoCA Path Filter:				
5 - 750MHz	dB	-50	-45	-
750 - 1002MHz	dB	-42	-40	-
1125 - 1525MHz	dB	-2.0	-	-3.0
2000MHz	dB	-35	-30	-

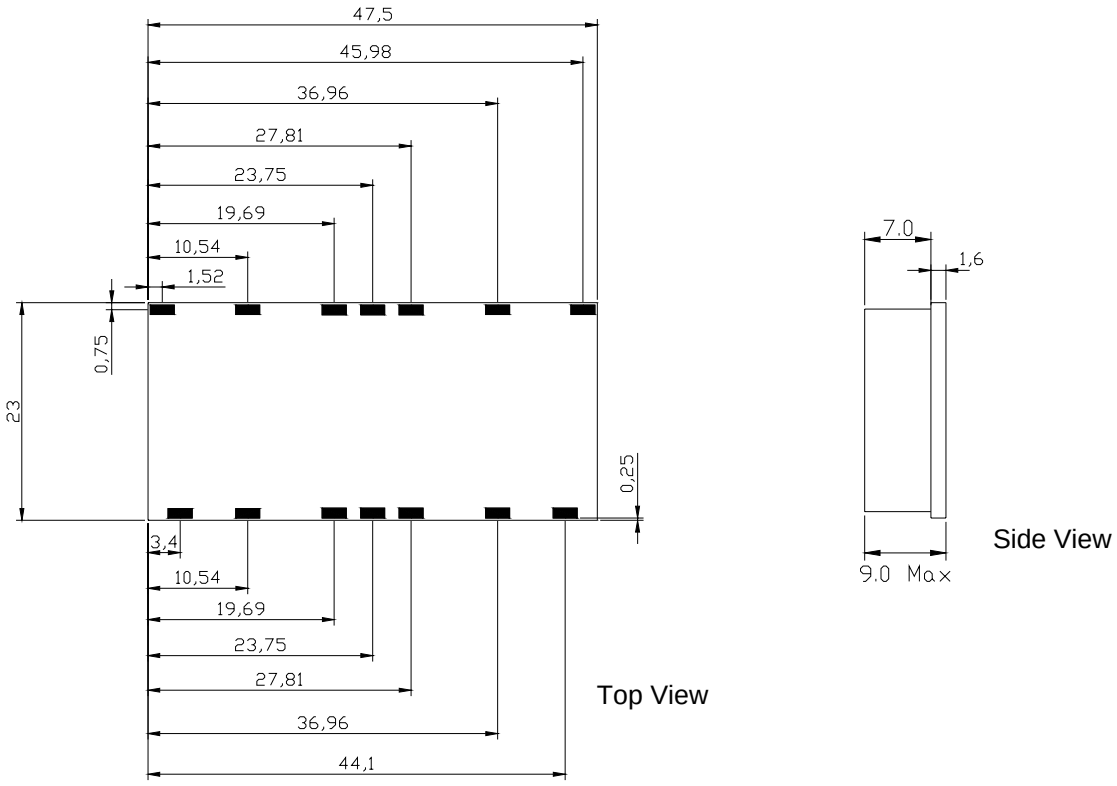
Recommended Maximum Ratings

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

- ***Full temperature plots are available upon request.***

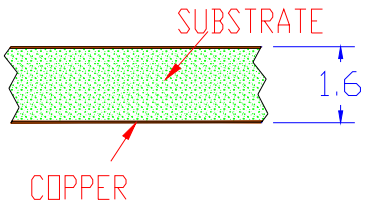
• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400
• **India** Tel: +91.80.4155721 • **China** Tel: +86.21.2407.1588
Visit www.macomtech.com for additional data sheets and product information.

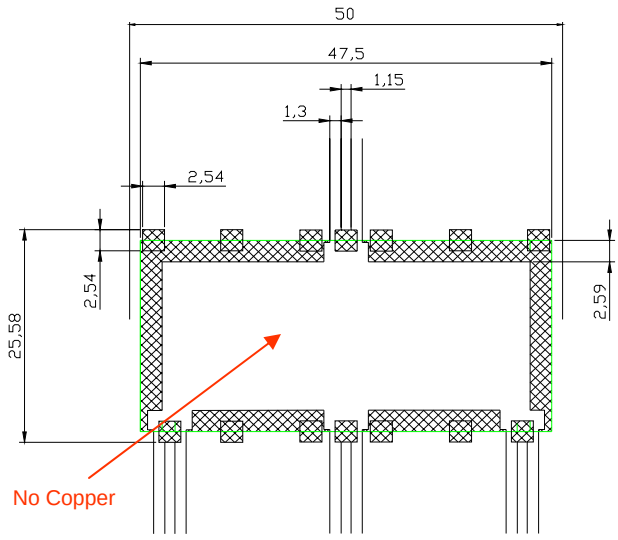
Outline Drawing: SM-198



Recommended PCB Configuration

- Track dimension = 1.15mm
- Gap dimension = 1.3mm
- 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.
- Recommended stack up as follows:





* Dimensions are millimeters ±0.1 unless otherwise specified.

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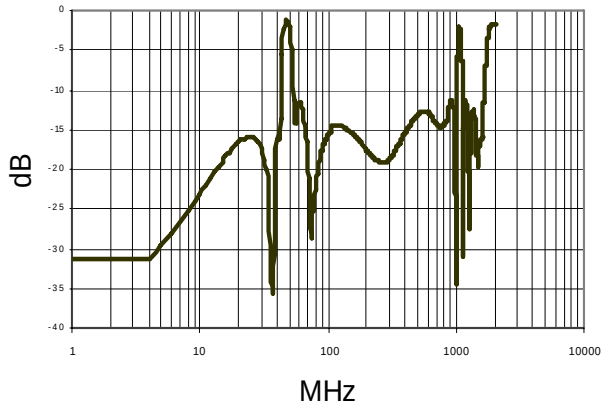
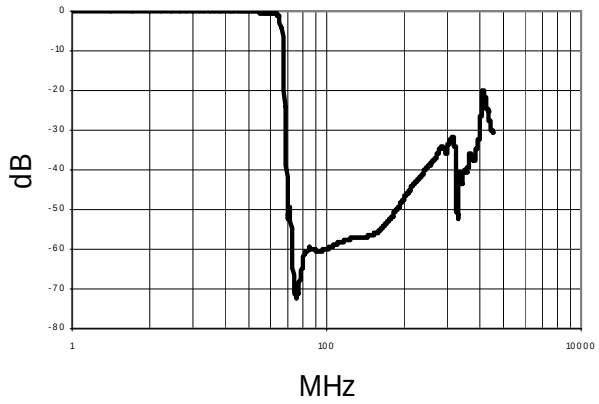
Typical Performance Curves

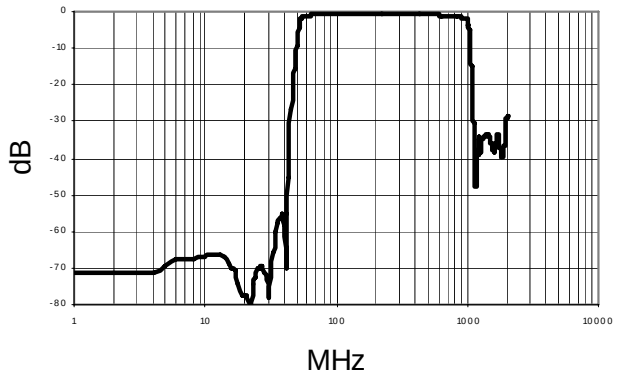
Common port Return Loss:



Common to Reverse Path filter performance:



Common to Forward Path filter performance



Common to MoCA Path filter performance