CATV Diplex Filter 5 - 864 / 1128 - 1525 MHz

Rev. V3

MACOM

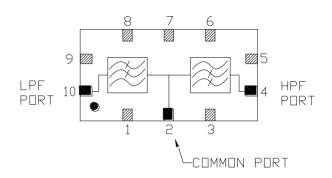
Features

- 75 Ohm
- SMT unit
- RoHS* Compliant

Description

• M/A-COM Technology Solutions MAFL-009217-CD0AC0 is a surface mount diplex filter unit designed for MoCA applications.

Functional Schematic



Product Image



Recommended Maximum Ratings^{1,2}

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

1. Exceeding any one or combination of these limits may cause permanent damage to this device.

 M/A-COM Technology Solutions does not recommend sustained operation near these survivability limits.

Pin Configuration

Function	Pin Number
Common Port	2
Low Pass Port	10
High Pass Port	4
Ground	1, 3, 5 - 9
Not connected	-

* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

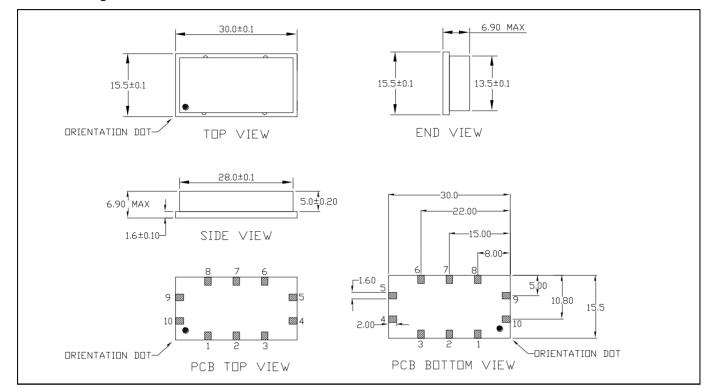
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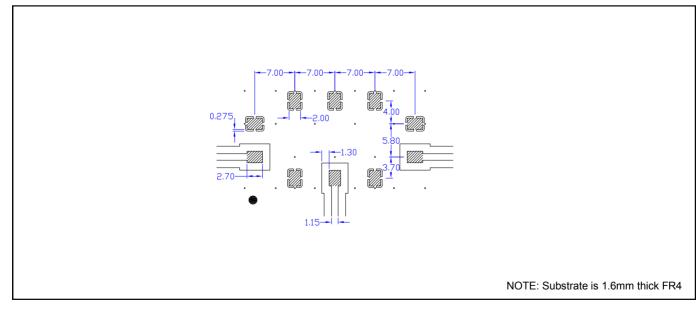


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Outline Drawing: SM-172



Recommended PCB Configuration



Dimensions in mm. Tolerance: .x \pm 0.1, .xx \pm 0.05 unless otherwise noted

2

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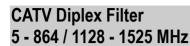


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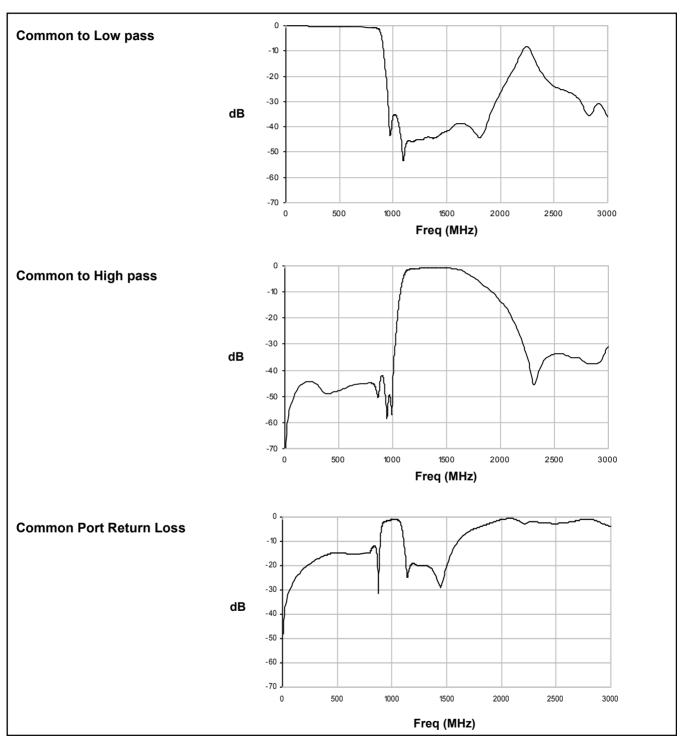
Rev. V3

Electrical Specifications: $T_A = 25^{\circ}C$, $Z_0 = 75\Omega$

Parameter	Units	Min	Тур	Мах
Common to Low				
Insertion Loss				
5 - 750 MHz	dB	-	0.5	1.0
750 -864 MHz	dB	-	1.0	1.5
Rejection	٩D	20	25	
977 - 1023 MHz	dB	30	35	-
1128 - 1525 MHz	dB	37	44	-
Common to High				
Insertion Loss				
1128 - 1525 MHz	dB	-	1.5	2.0
Rejection				
5 - 750 MHz	dB	40	44	-
750 - 864 MHz	dB	37	45	-
977 - 1023 MHz	dB	30	43	-
2300 - 2400 MHz	dB	30	34 25	-
2400 - 3000 MHz	dB	20	25	-
Common Port Return Loss				
5 - 864 MHz	dB	12	14	-
1128 - 1525 MHz	dB	12	18	-
Common Port Voltage Transient	V	-	-	200



Typical Performance Curves at +25°C



4

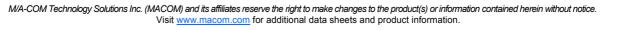
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Tape Specification



Ordering Information

Part Number

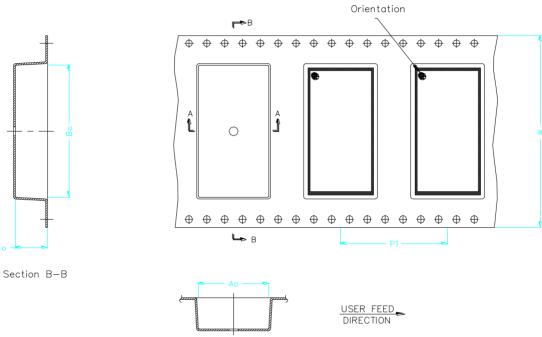
MAFL-009217-CD0AC0

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	Sectio	on A-,
ltem	Dimension	
Ao	15.80mm +/- 0.1mm	
Во	30.30mm +/- 0.1mm	
Ko	7.20mm +/- 0.1mm	
W	44.00mm +/- 0.3mm	
P1	24.00mm +/- 0.1mm	

Package

200 pcs Reel







Rev. V3





Rev. V3

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