

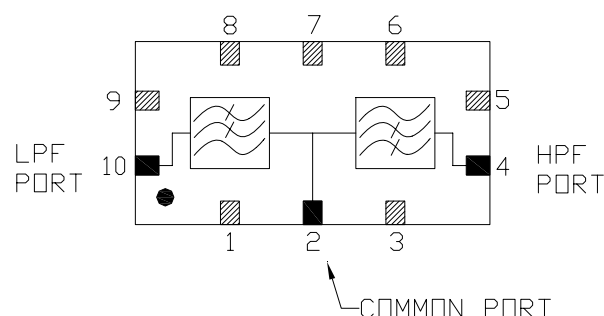
Features

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

Pin Configuration

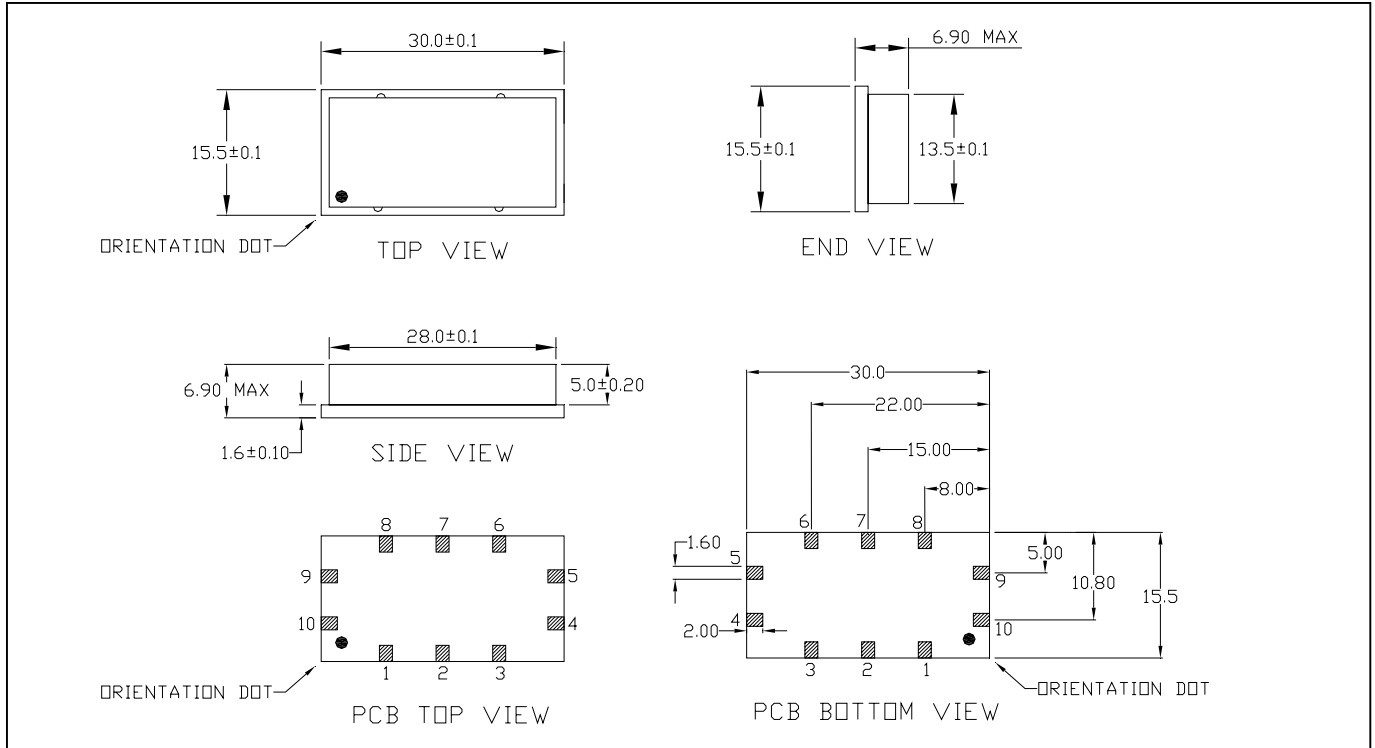
Function	Pin Number
Common Port	2
Low Pass Port	10
High Pass Port	4
Ground	1, 3, 5 - 9
Not connected	-

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

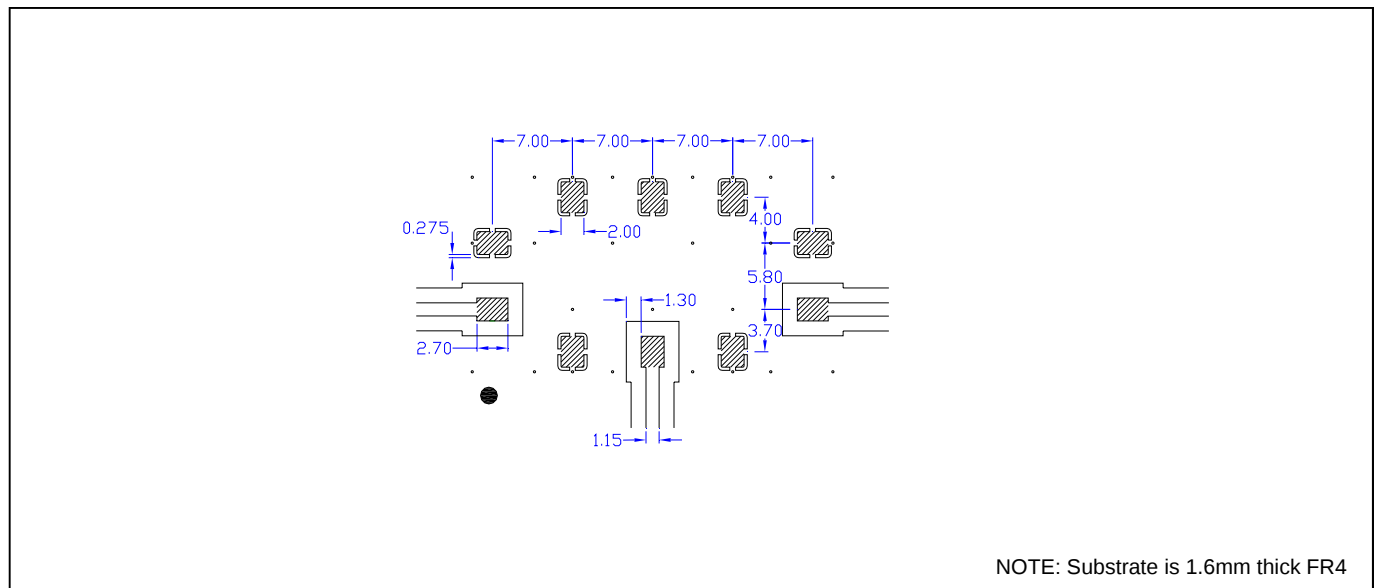
CATV Diplex Filter 5 - 864 / 1128 - 1525 MHz

Rev. V2

Outline Drawing: SM-172



Recommended PCB Configuration



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

CATV Diplex Filter
5 - 864 / 1128 - 1525 MHz

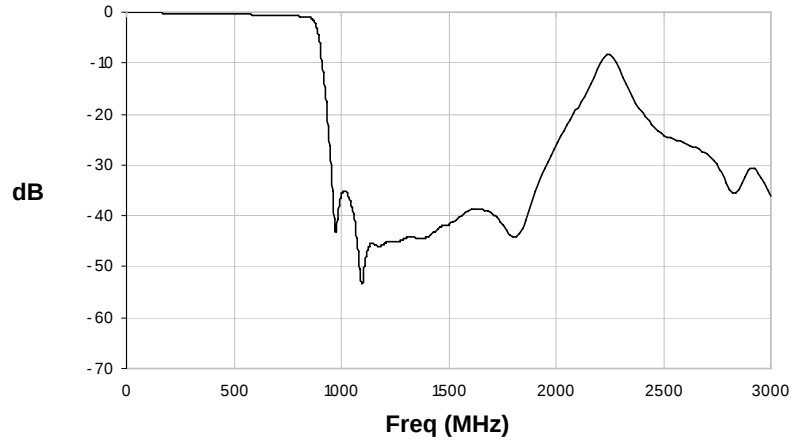
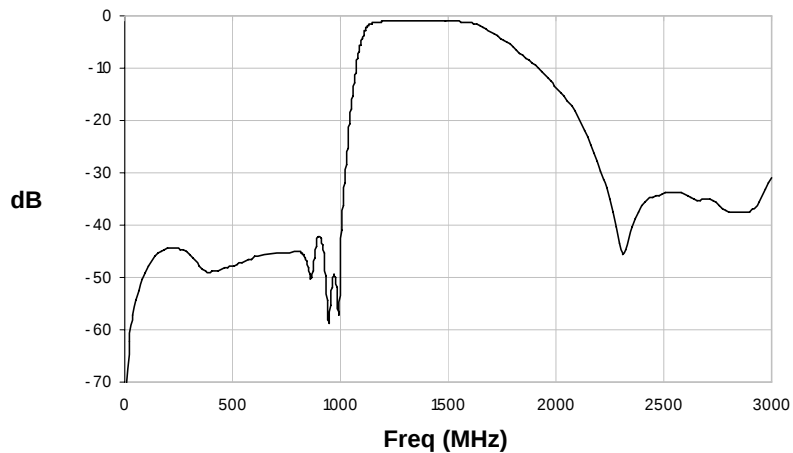
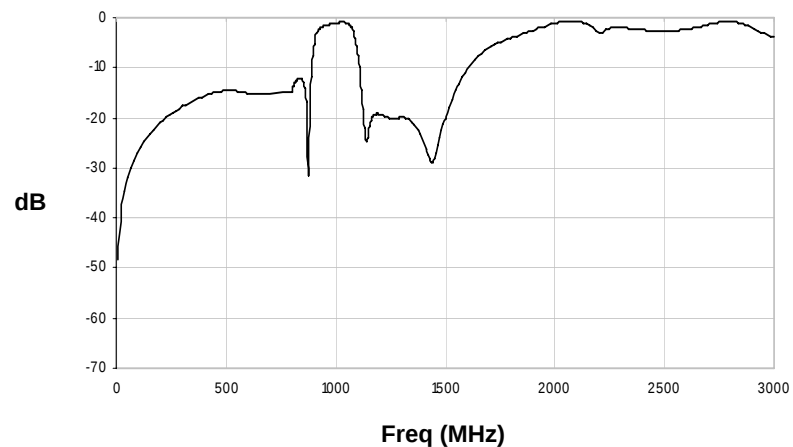
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Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$

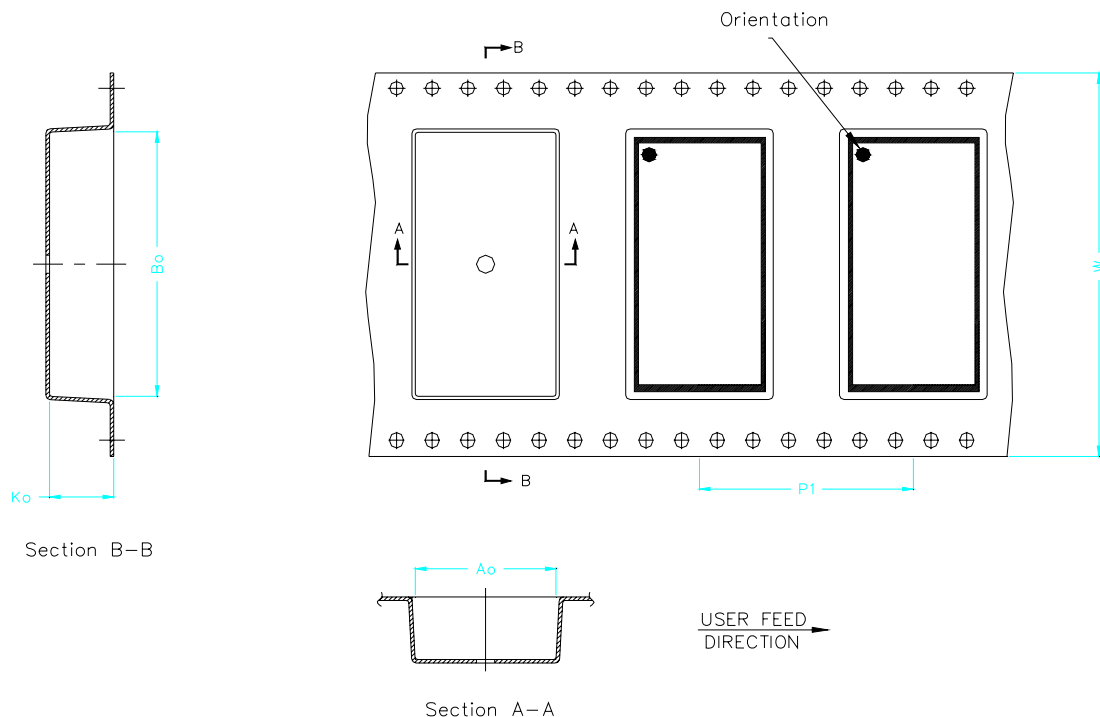
Parameter		Units	Min	Typ	Max
Common to Low					
Insertion Loss	5 - 750 MHz	dB	-	0.5	1.0
	750 - 864 MHz	dB	-	1.0	1.5
Rejection	977 - 1023 MHz	dB	30	35	-
	1128 - 1525 MHz	dB	37	44	-
Common to High					
Insertion Loss	1128 - 1525 MHz	dB	-	1.5	2.0
Rejection	5 - 750 MHz	dB	40	44	-
	750 - 864 MHz	dB	37	45	-
	977 - 1023 MHz	dB	30	43	-
	2300 - 2400 MHz	dB	30	34	-
	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

CATV Diplex Filter
5 - 864 / 1128 - 1525 MHz

Rev. V2

Typical Performance Curves at +25°C**Common to Low pass****Common to High pass****Common Port Return Loss**

Tape Specification



Item	Dimension
Ao	15.80mm +/- 0.1mm
Bo	30.30mm +/- 0.1mm
Ko	7.20mm +/- 0.1mm
W	44.00mm +/- 0.3mm
P1	24.00mm +/- 0.1mm

Ordering Information

Part Number	Package
MAFL-009217-CD0AC0	200 pcs Reel