

# MAFL-009272-CD0AC0



## CATV Diplex Filter 5 - 1002 / 1125 - 1675 MHz

Rev. V6

### Features

- 75 Ohm
- SMT unit
- RoHS Compliant

### Description

- M/A-COM's MAFL-009272-CD0AC0 is a surface mount diplex filter unit designed for MoCA applications.

### Ordering Information

Part Number	Package
MAFL-009272-CD0AC0	200 Piece Reel

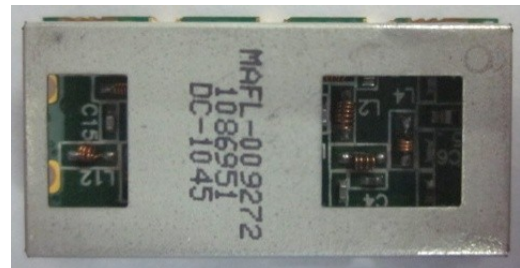
### Pin Configuration

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

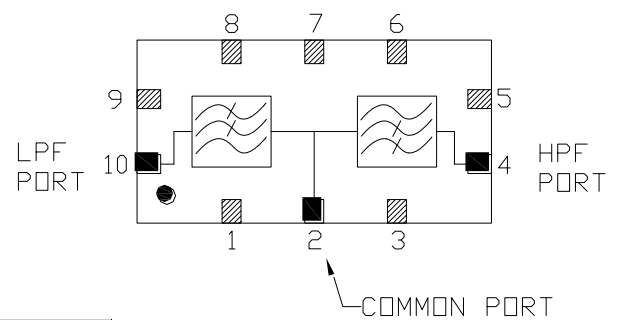
### Electrical Specifications: $T_A = 25^\circ\text{C}$ , $Z_0 = 75\Omega$

Parameter	Units	Min	Typ	Max
<b>Common to Low</b>				
Insertion Loss				
5 - 42 MHz	dB	-	0.05	0.25
42 - 860 MHz	dB	-	0.6	1.0
860 - 1002 MHz	dB	-	1.5	1.7
Rejection				
1130 - 1550 MHz	dB	37	40	-
1550 - 1675 MHz	dB	36	40	-
<b>Common to High</b>				
Insertion Loss				
1125 - 1675 MHz	dB	-	1.7	2.0
Rejection				
5 - 1002 MHz	dB	37	40	-
2250 - 2400 MHz	dB	30	33	-
2400 - 2600 MHz	dB	18	20	-
2600 - 3000 MHz	dB	10	12	-
<b>Common Port Return Loss</b>				
5 - 600 MHz	dB	12	16	-
600 - 950 MHz	dB	11	12	-
950 - 1002 MHz	dB	12	13	-
1125 - 1200 MHz	dB	12	13	-
1200 - 1550 MHz	dB	11	12	-
1550 - 1675 MHz	dB	9.5	11	-
<b>Common port voltage transient</b>	V	-	-	200

### Product Image



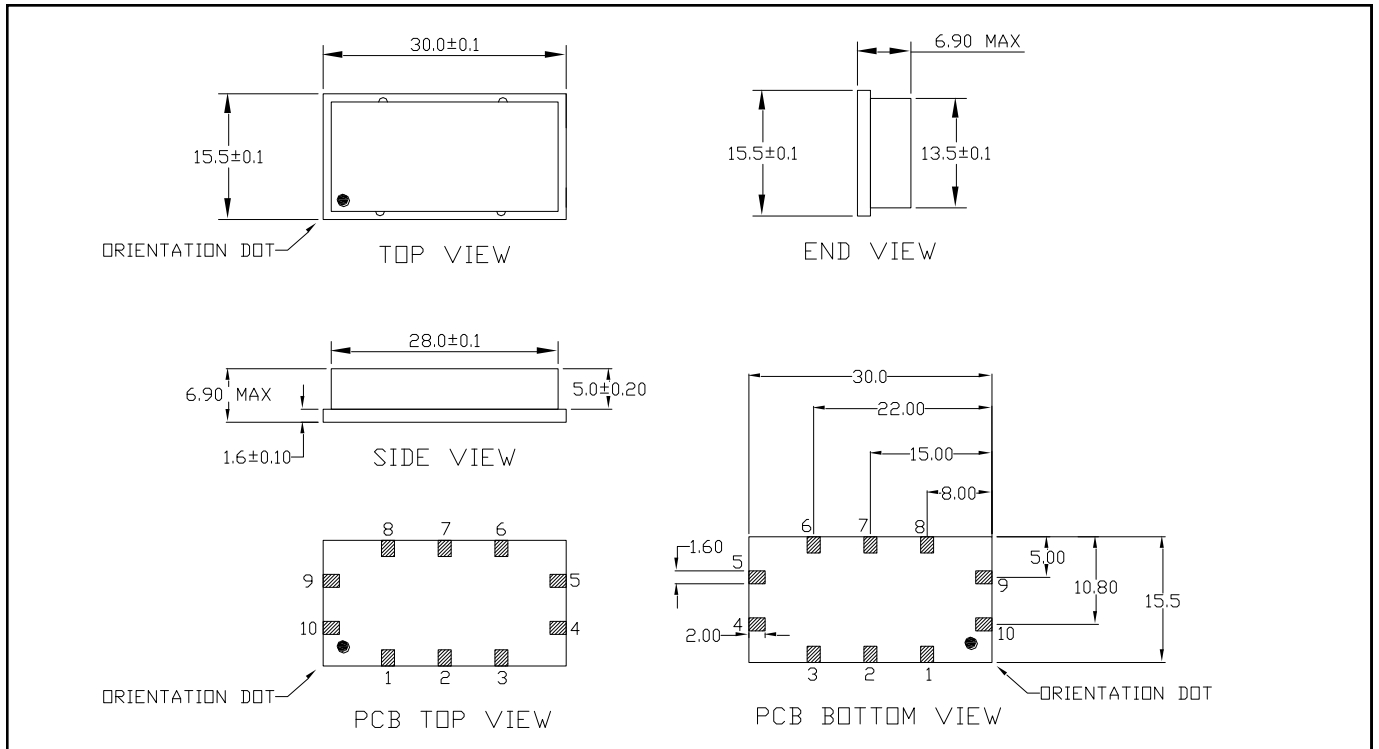
### Functional Schematic



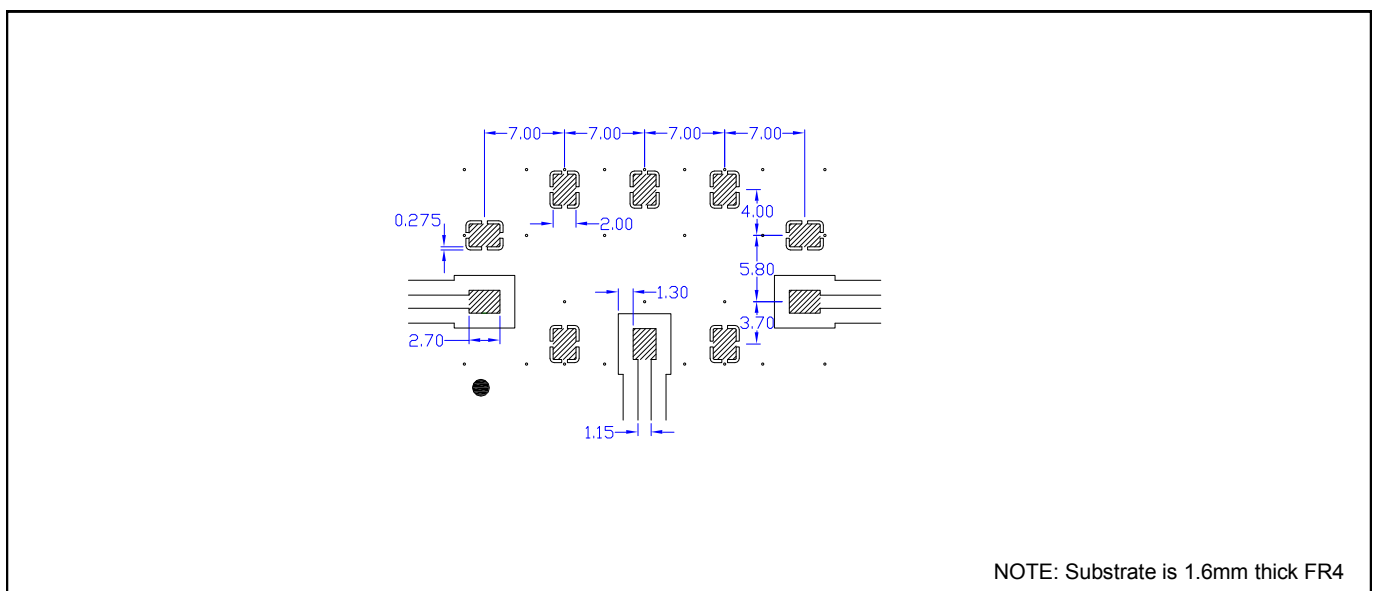
### Absolute Maximum Ratings

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

**Outline Drawing: SM-172**

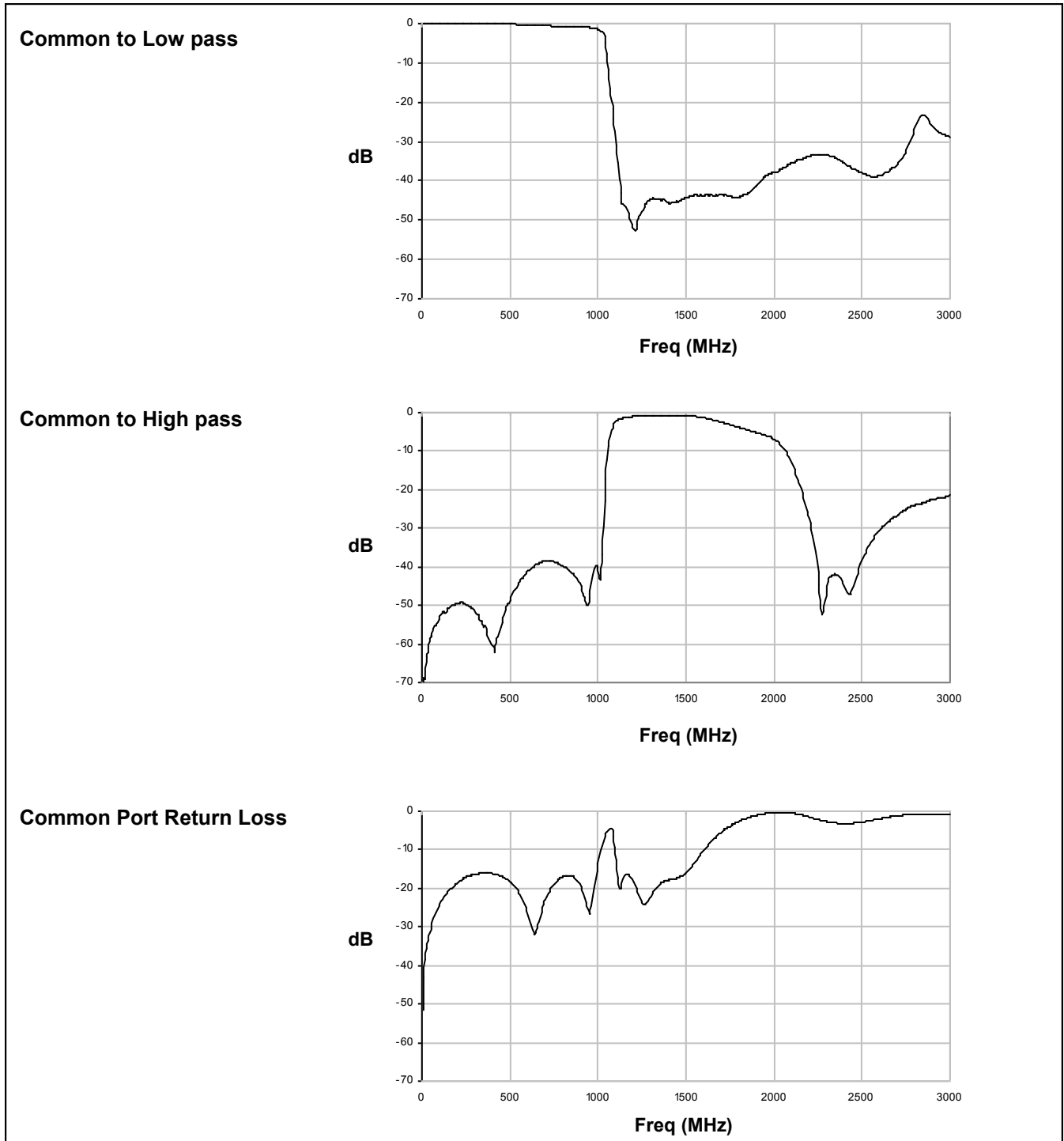


**Recommended PCB Configuration**

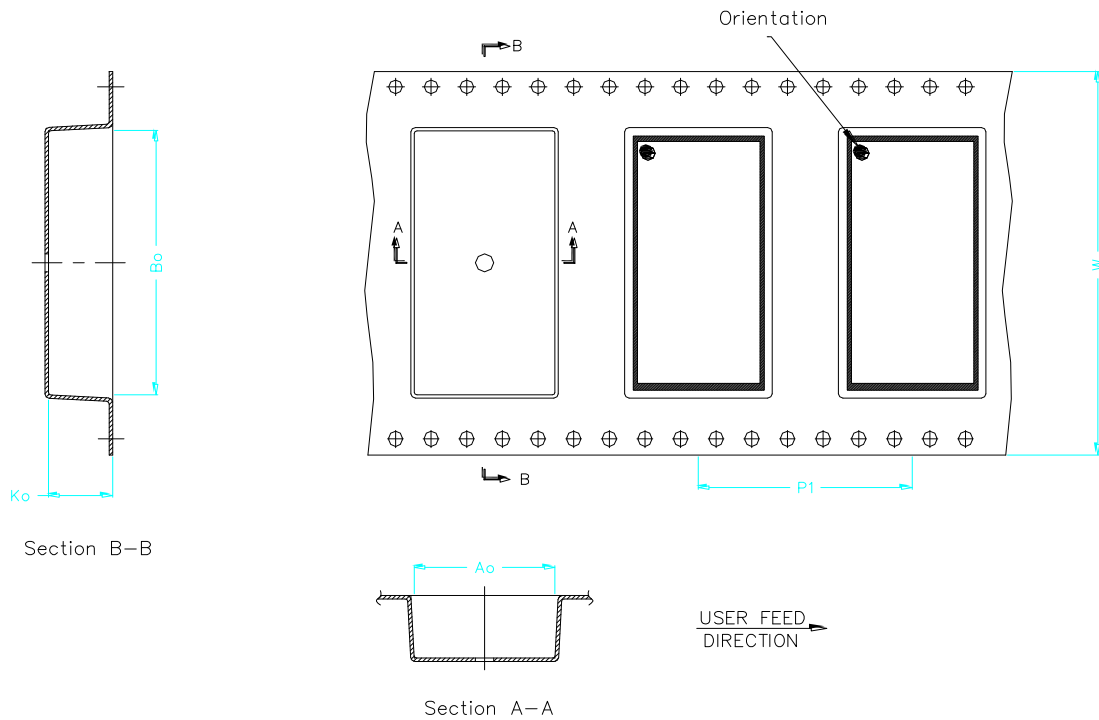


Dimensions in mm. Tolerance: .x ± 0.1, .xx ± 0.05 unless otherwise noted

Typical Performance Curves at +25°C



## 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

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