

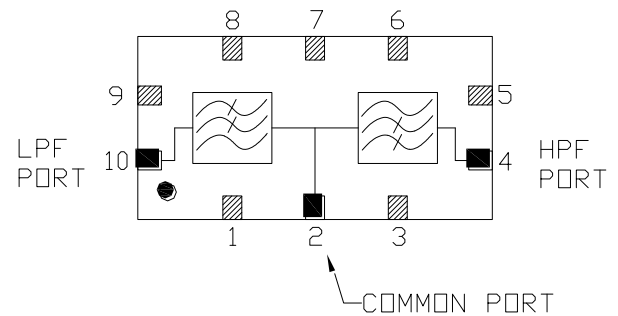
## Features

- 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<sup>1,2</sup>

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

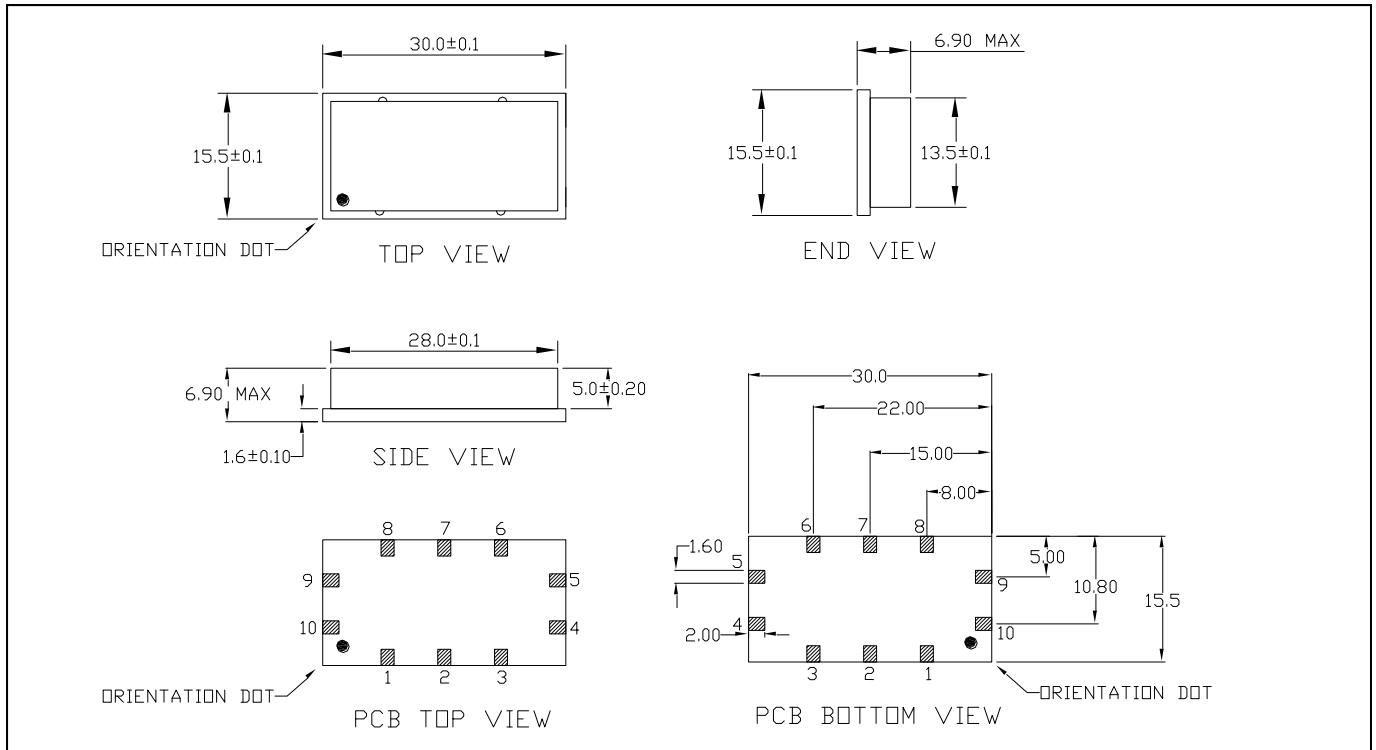
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM Technology Solutions does not recommend sustained operation near these survivability limits.

## Pin Configuration

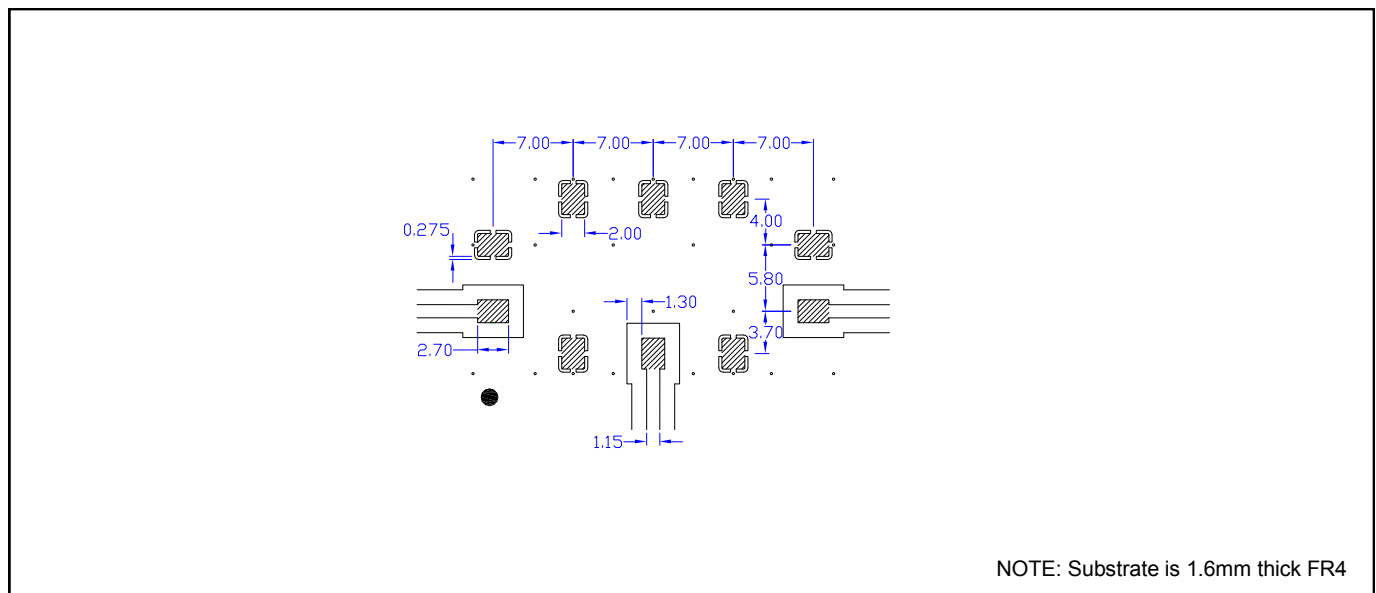
Function	Pin Number
Common Port	2
Low Pass Port	10
High Pass Port	4
Ground	1, 3, 5 - 9
Not connected	-

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

**Outline Drawing: SM-172**



**Recommended PCB Configuration**



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

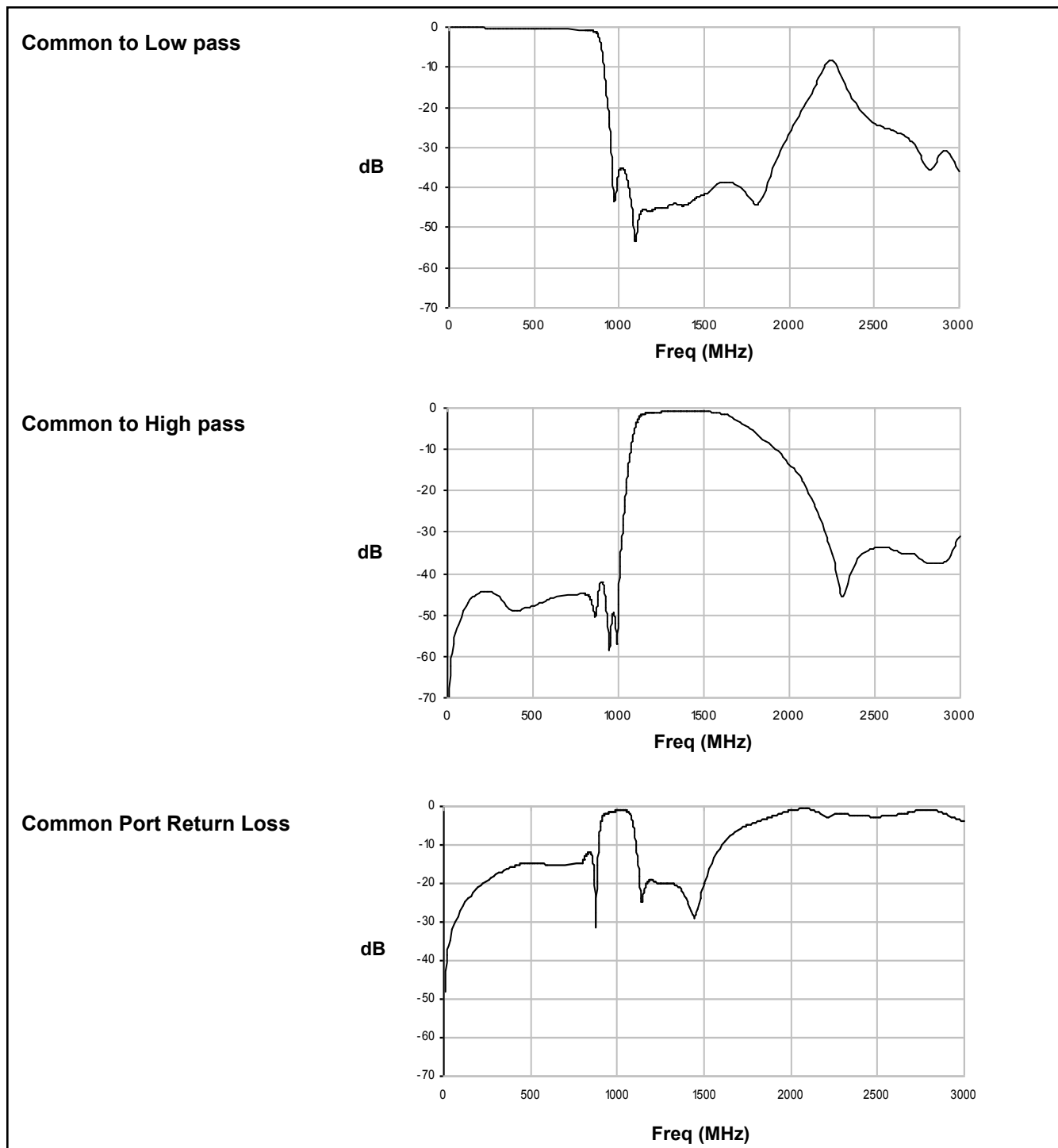
**CATV Diplex Filter**  
**5 - 864 / 1128 - 1525 MHz**

Rev. V3

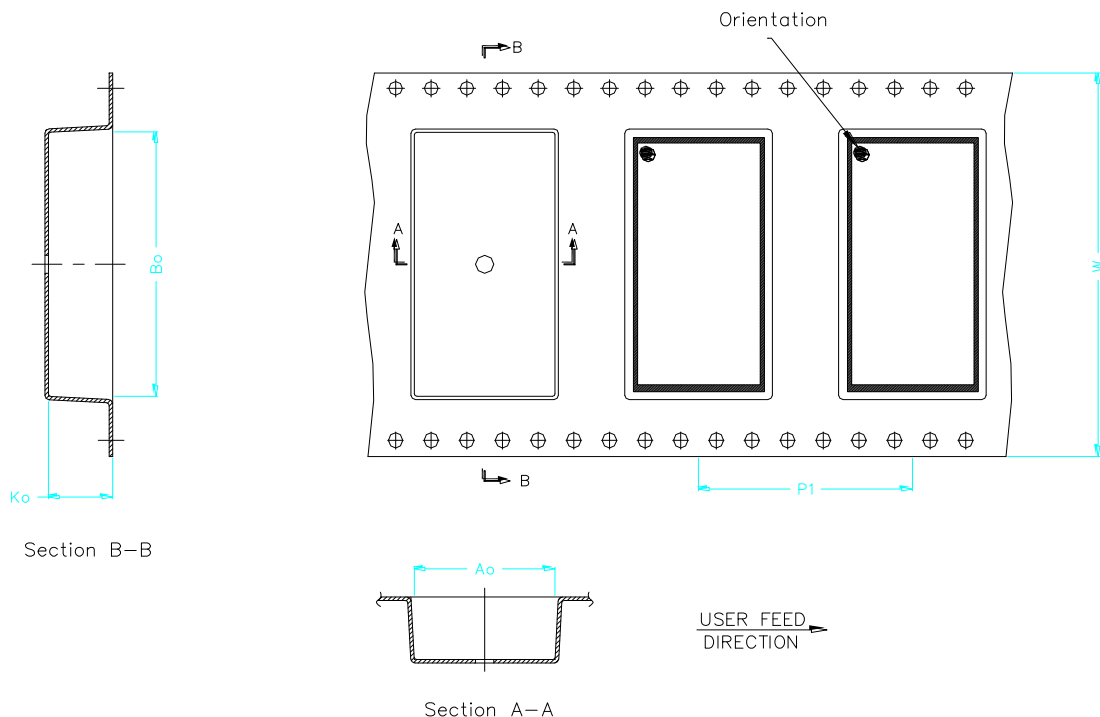
**Electrical Specifications:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 75\Omega$**

Parameter		Units	Min	Typ	Max
Insertion Loss	<b>Common to Low</b>				
	5 - 750 MHz	dB	-	0.5	1.0
Rejection	750 - 864 MHz	dB	-	1.0	1.5
	977 - 1023 MHz	dB	30	35	-
	1128 - 1525 MHz	dB	37	44	-
Insertion Loss	<b>Common to High</b>				
	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	-
	<b>Common Port Return Loss</b>				
	5 - 864 MHz	dB	12	14	-
	1128 - 1525 MHz	dB	12	18	-
<b>Common Port Voltage Transient</b>		V	-	-	200

## 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

## Ordering Information

Part Number	Package
MAFL-009217-CD0AC0	200 pcs Reel

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