

# MAFL-011012



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

M/A-COM Products  
V1

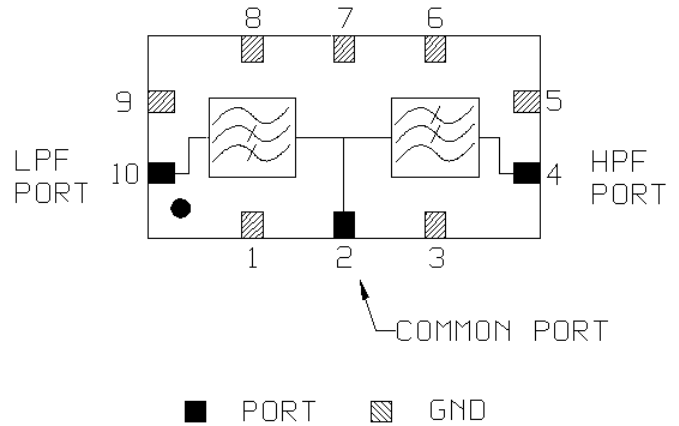
### Description

- M/A-COM Technology Solutions MAFL-011012 is a surface mount diplex filter unit designed for MoCA applications.

### Features

- 75 Ohm
- SMT unit
- RoHS\* Compliant

### Functional Schematic



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	39	-
1550 - 1675 MHz	dB	36	39	-
<b>Common to High</b>				
Insertion Loss				
1125 - 1675 MHz	dB	-	1.5	2.0
Rejection				
5 - 1002 MHz	dB	37	39	-
2250 - 2400 MHz	dB	30	40	-
2400 - 2600 MHz	dB	18	50	-
2600 - 3000 MHz	dB	10	45	-
<b>Common Port Return Loss</b>				
5 - 600 MHz	dB	12	14	-
600 - 950 MHz	dB	11	14	-
950 - 1002 MHz	dB	12	13	-
1125 - 1200 MHz	dB	12	13	-
1200 - 1550 MHz	dB	11	14	-
1550 - 1675 MHz	dB	9.5	14	-
<b>Common port voltage transient</b>	V	-	-	200

### Pin Configuration

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

### 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

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

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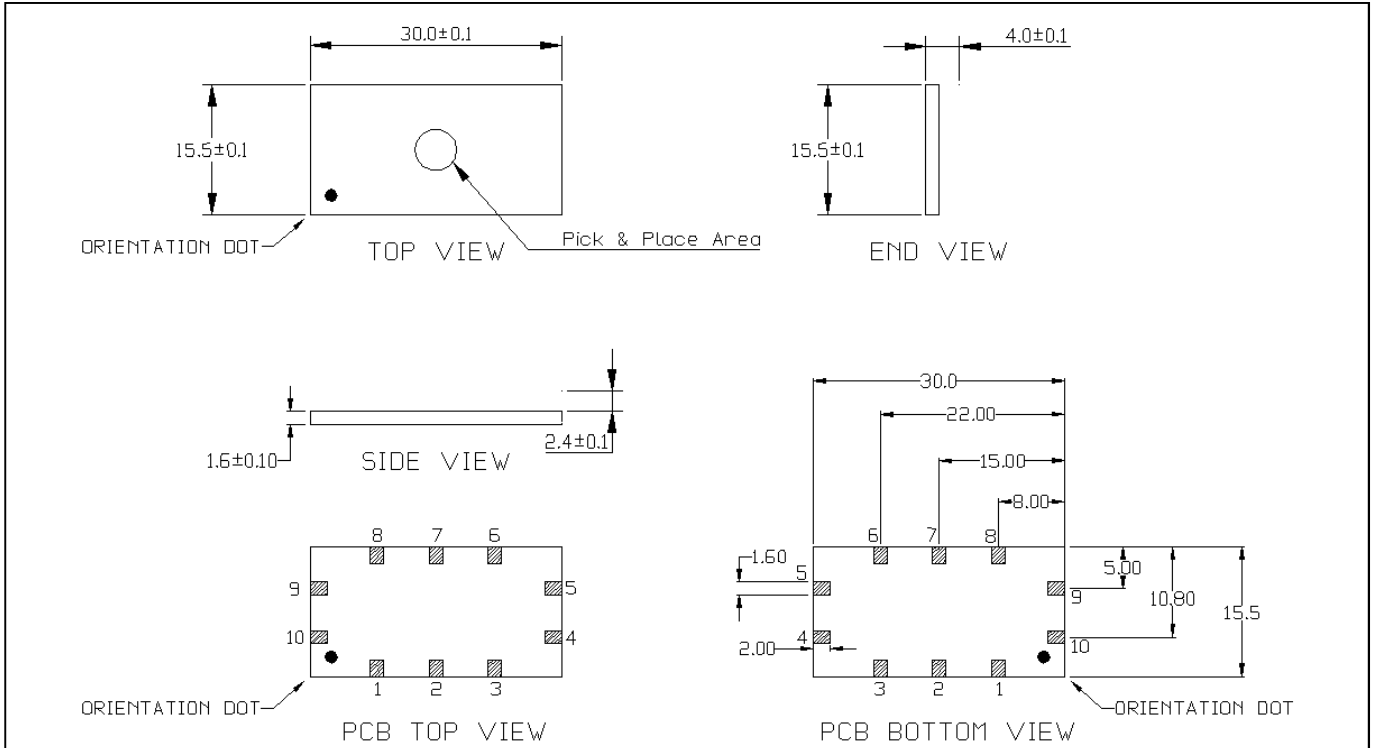
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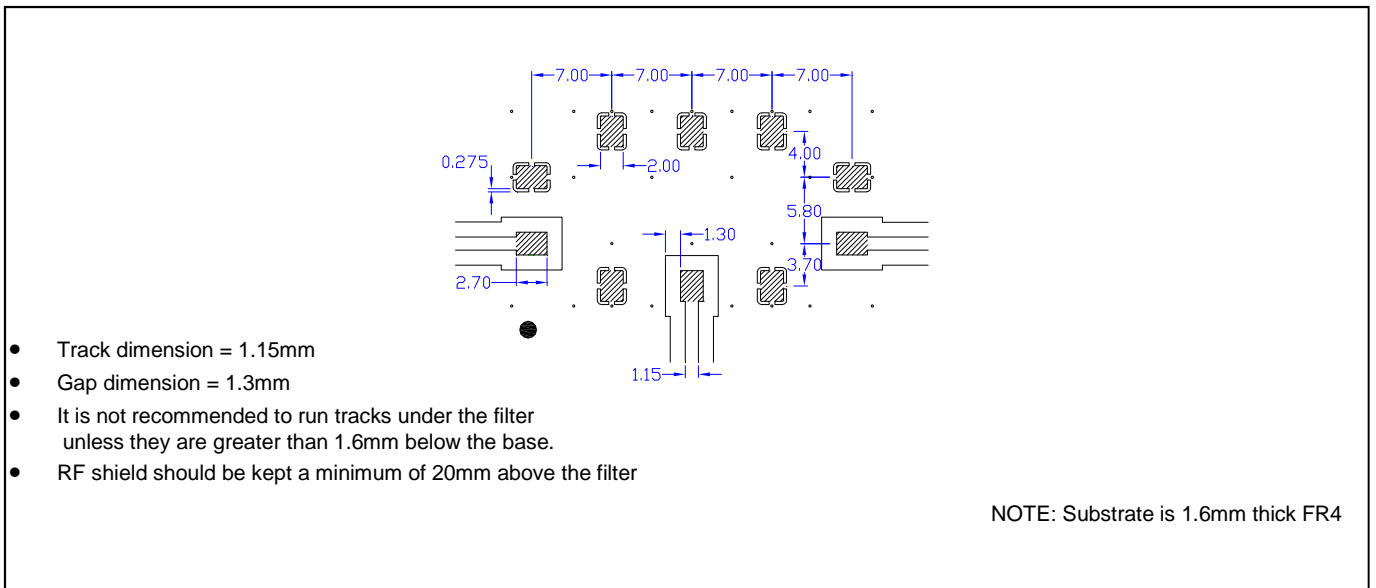
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## Outline Drawing:



Dimensions in mm. Tolerance:  $.x \pm 0.1$

## Recommended PCB Configuration



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

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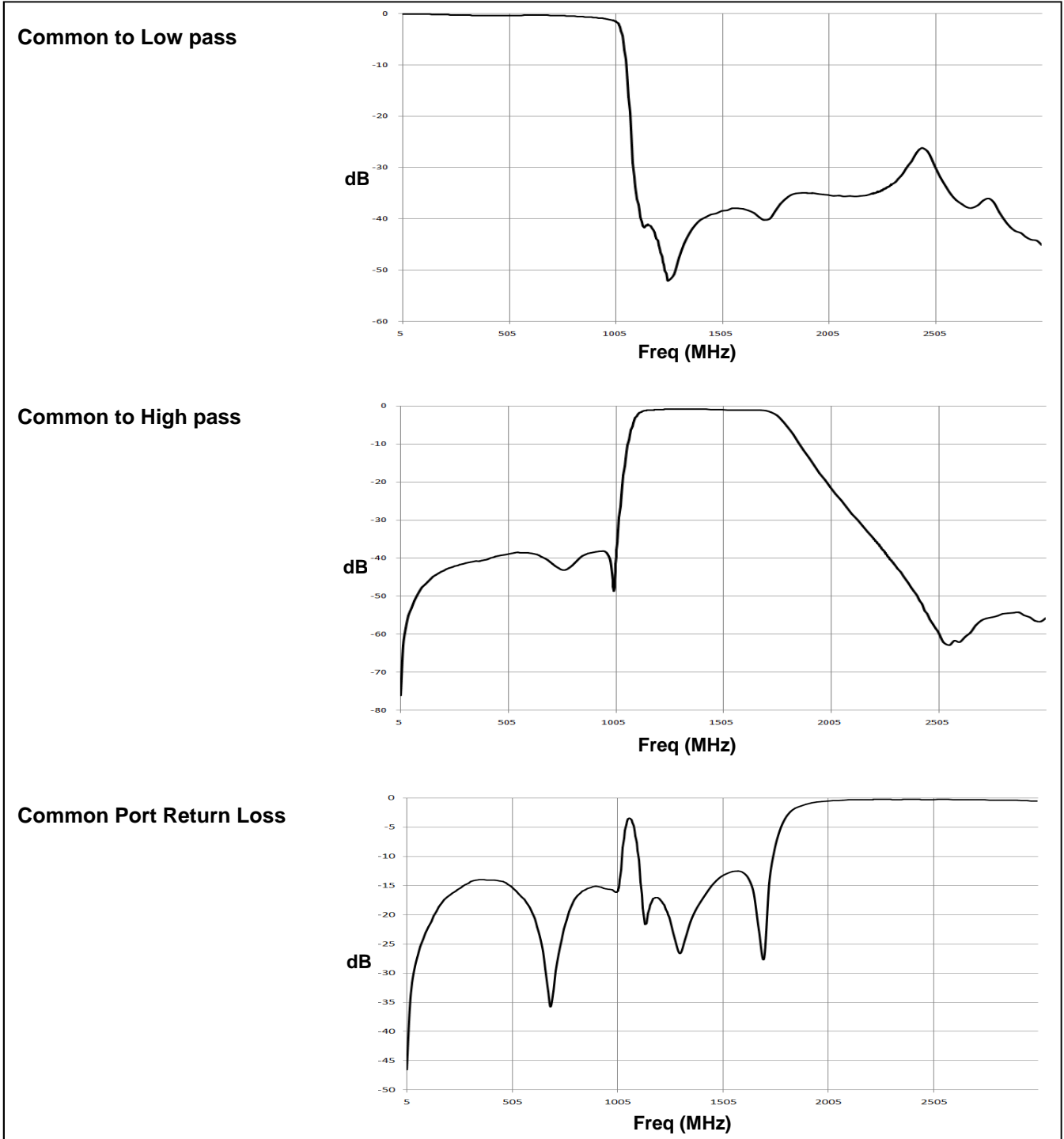
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## Typical Performance Curves at +25°C



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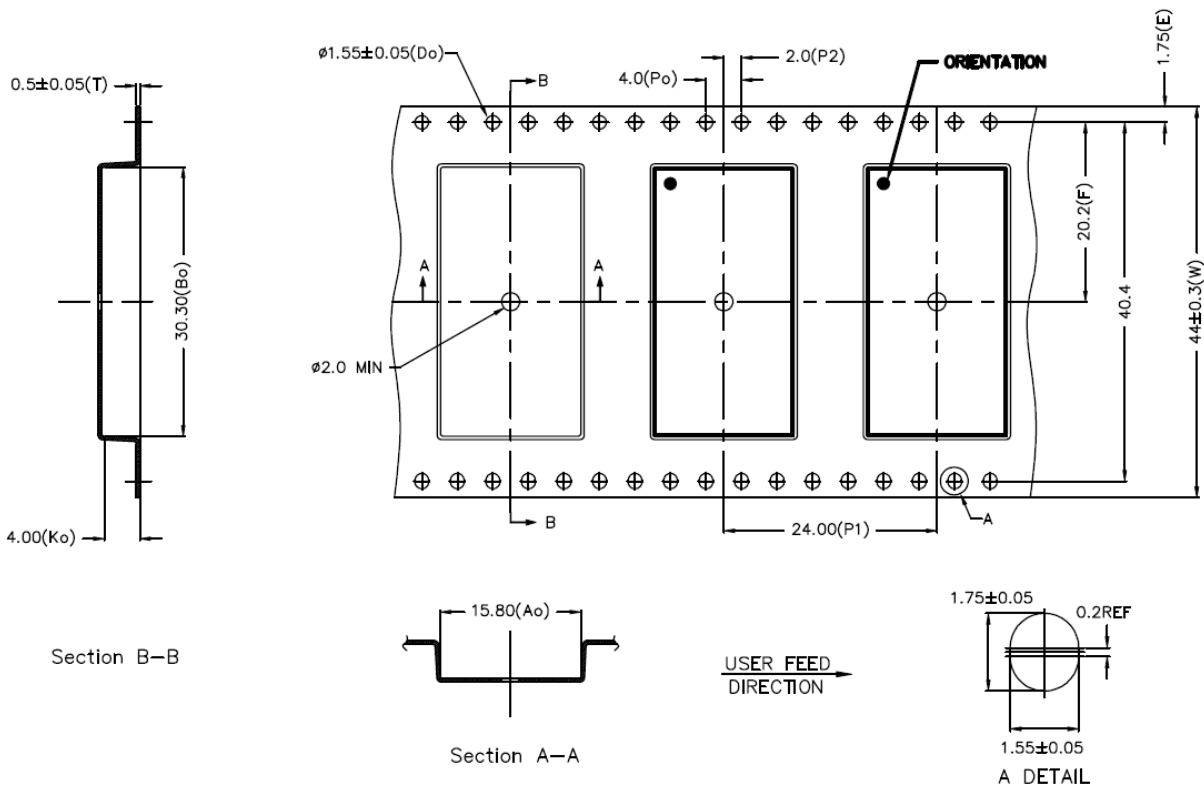
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## Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	500
Reel Size	mm	330
Tape Width	mm	44.00
Pitch	mm	24.00
Ao	mm	15.80
Bo	mm	30.30
Ko	mm	4.00
Orientation	-	F30
Reference Application Note ANI-019 for orientation		

## Ordering Information

Part Number	Package
MAFL-011012	Tape & Reel



Rev	Date	Description	CO
V1	12 March 2012	Production Release	CO - 003880

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