

# CATV Diplex Filter 5 - 1002 / 1125 - 1550 MHz

Rev. V4

#### **Features**

- 75 Ohm
- SMT unit
- RoHS Compliant

#### **Description**

 M/A-COM's MAFL-008290-CD0AC0 is a surface mount diplex filter unit designed for MoCA applications.

#### **Ordering Information**

Part Number	Package
MAFL-008290-CD0AC0	200 Piece Reel

#### **Pin Configuration**

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

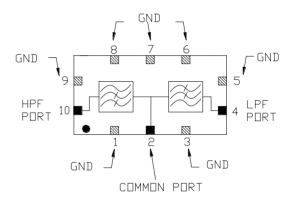
#### Electrical Specifications: $T_A = 25$ °C, $Z_0 = 75\Omega$

Parameter	Units	Min	Тур	Max
Common to Low				
Insertion Loss				
5 - 42 MHz	dB	-	0.05	0.25
42 - 860 MHz	dB	-	0.6	1.0
860 -1002 MHz	dB	-	1.4	1.5
Rejection				
1130 - 1550 MHz	dB	37	40	-
Common to High				
Insertion Loss				
1125 - 1550 MHz	dB	-	1.7	2.0
Rejection				
5 - 1002 MHz	dB	37	40	-
2250 - 2500 MHz	dB	30	33	-
2500 - 3000 MHz	dB	20	22	-
Common Port Return Loss				
5 - 650 MHz	dB	12	15	-
650 - 1002 MHz	dB	12	13	-
1125 - 1500 MHz	dB	13.5	14	-
1500 - 1550 MHz	dB	12	13	-
Common port voltage transient	V	-	-	200

#### **Product Image**



#### **Functional Schematic**



#### **Absolute Maximum Ratings**

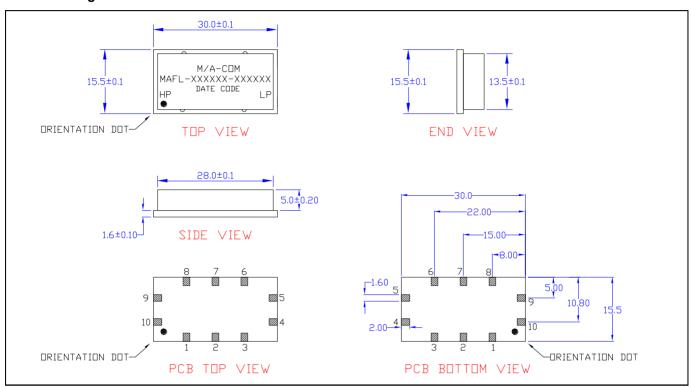
Parameter	Absolute Maximum		
Storage Temperature	-40°C to +85°C		
Operating Temperature	-40°C to +85°C		
DC Current	30mA		
RF Power	250mW		



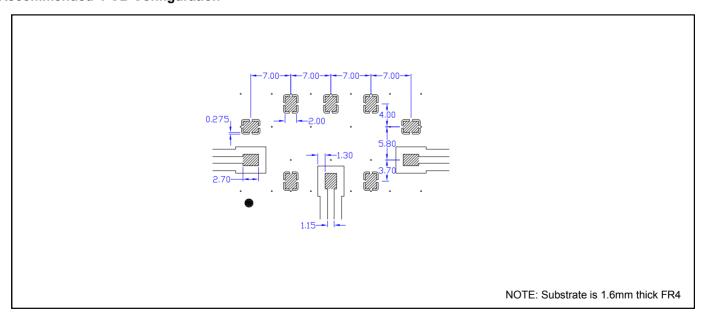
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#### **Outline Drawing: SM-172**



#### **Recommended PCB Configuration**



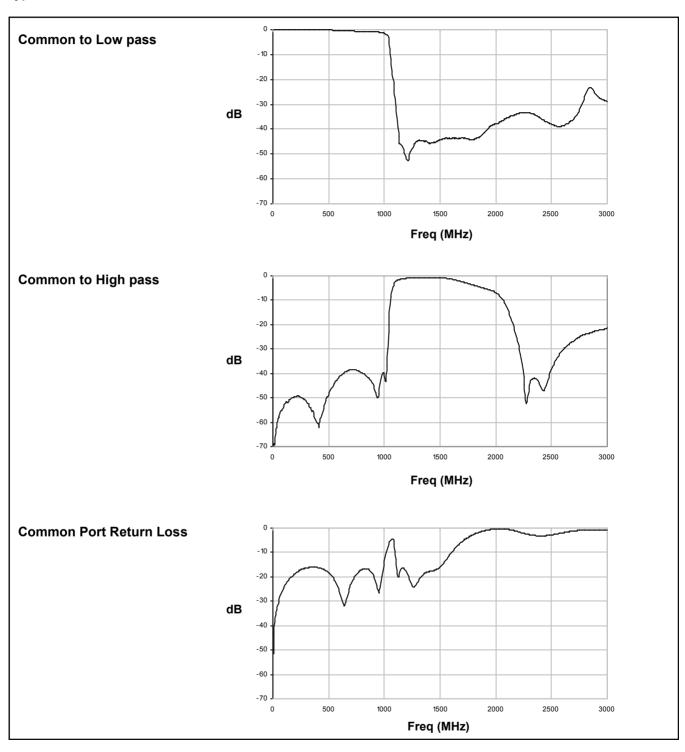
Dimensions in mm. Tolerance:  $.x \pm 0.1$ ,  $.xx \pm 0.05$  unless otherwise noted



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#### Typical Performance Curves at +25°C





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