

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

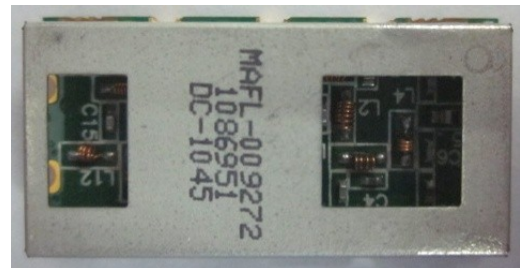
Pin Configuration

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

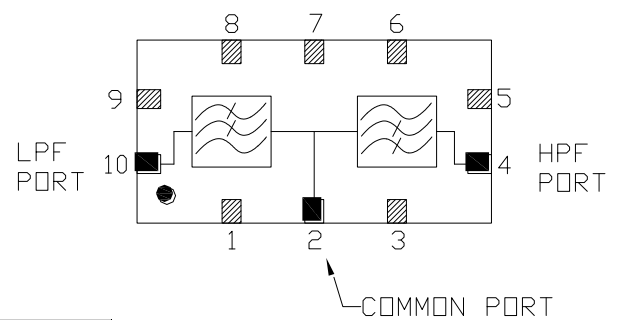
Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$

Parameter	Units	Min	Typ	Max
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	-	1.5	1.7
Rejection				
1130 - 1550 MHz	dB	37	40	-
1550 - 1675 MHz	dB	36	40	-
Common to High				
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	-
Common Port Return Loss				
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	-
Common port voltage transient	V	-	-	200

Product Image



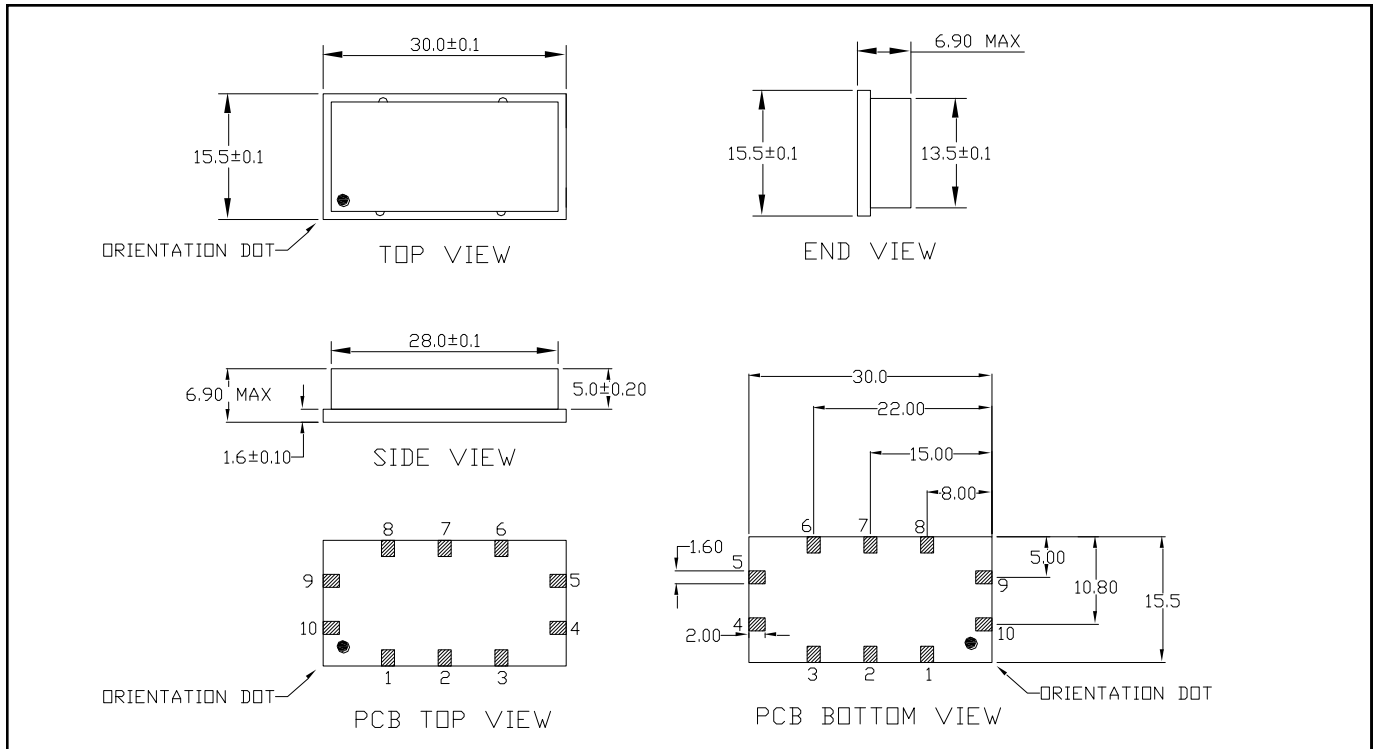
Functional Schematic



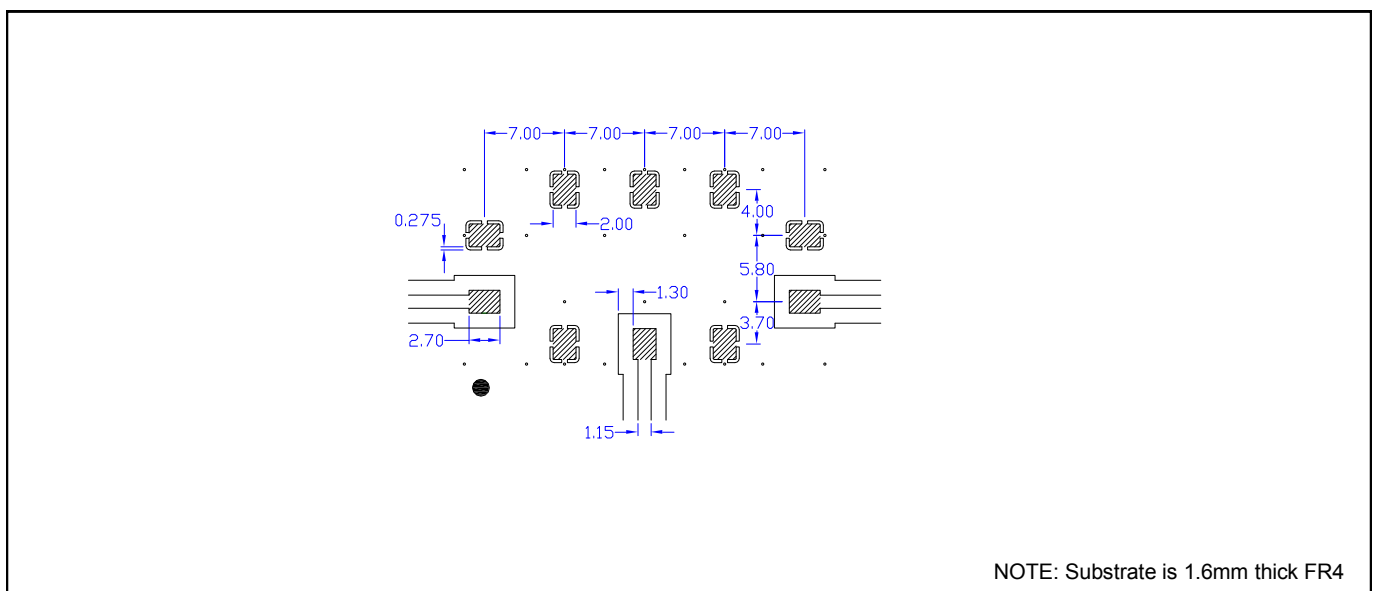
Absolute Maximum Ratings

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

Outline Drawing: SM-172

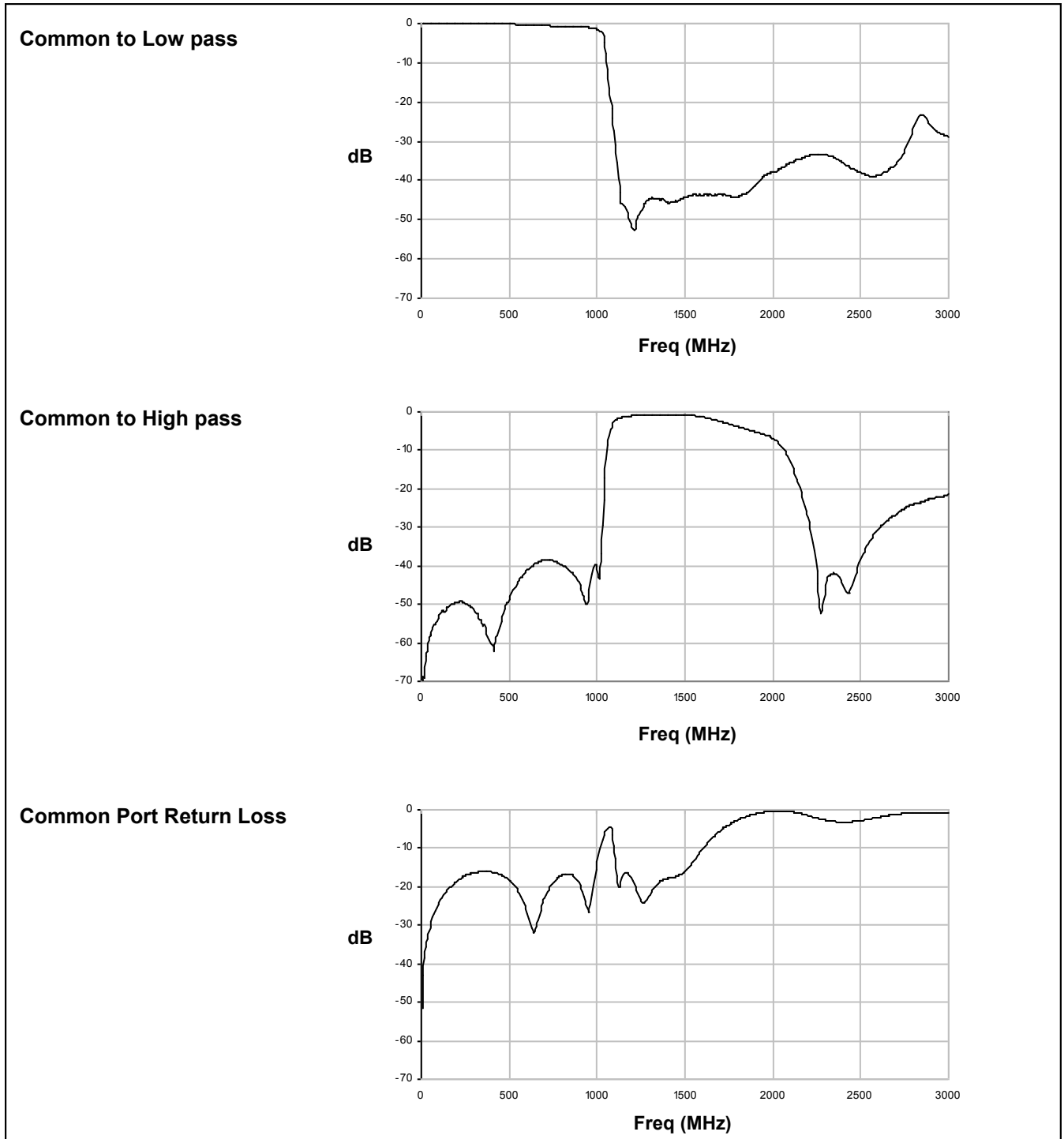


Recommended PCB Configuration

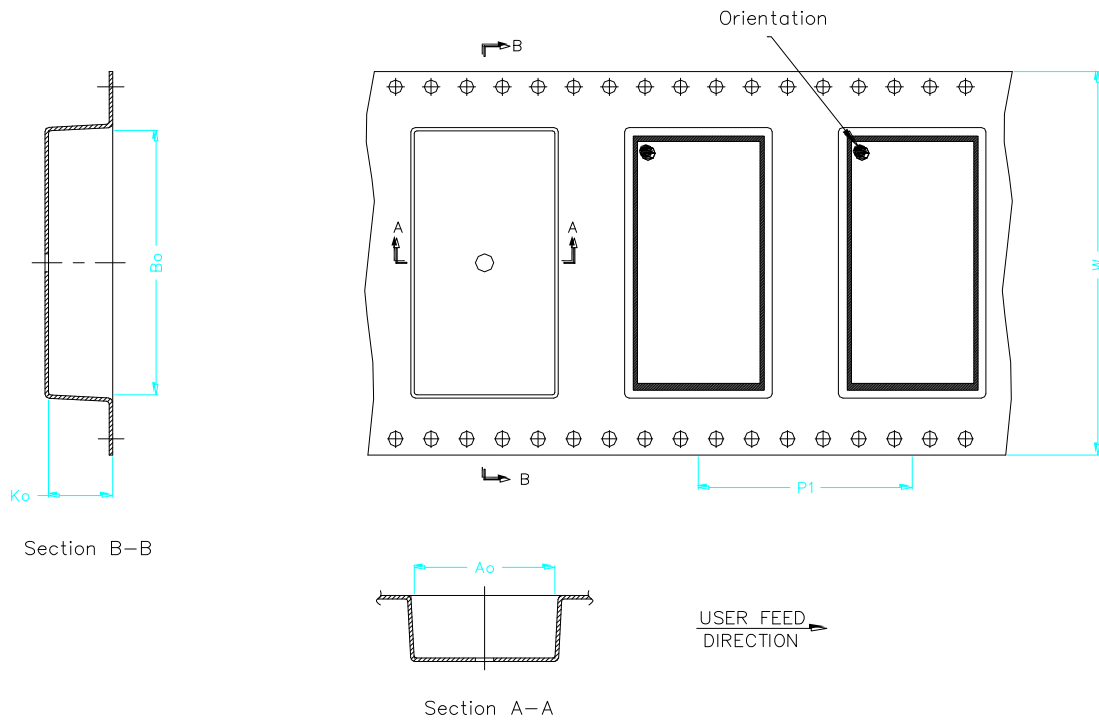


Dimensions in mm. Tolerance: $.x \pm 0.1$, $.xx \pm 0.05$ unless otherwise noted

Typical Performance Curves at +25°C



Tape Specification



Item	Dimension
A_o	15.80mm +/- 0.1mm
B_o	30.30mm +/- 0.1mm
K_o	7.20mm +/- 0.1mm
W	44.00mm +/- 0.3mm
$P1$	24.00mm +/- 0.1mm

M/A-COM Technology Solutions Inc. All rights reserved.

Information in this document is provided in connection with M/A-COM Technology Solutions Inc ("MACOM") products. These materials are provided by MACOM as a service to its customers and may be used for informational purposes only. Except as provided in MACOM's Terms and Conditions of Sale for such products or in any separate agreement related to this document, MACOM assumes no liability whatsoever. MACOM assumes no responsibility for errors or omissions in these materials. MACOM may make changes to specifications and product descriptions at any time, without notice. MACOM makes no commitment to update the information and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to its specifications and product descriptions. No license, express or implied, by estoppels or otherwise, to any intellectual property rights is granted by this document.

THESE MATERIALS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, RELATING TO SALE AND/OR USE OF MACOM PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, CONSEQUENTIAL OR INCIDENTAL DAMAGES, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. MACOM FURTHER DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. MACOM SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS, WHICH MAY RESULT FROM THE USE OF THESE MATERIALS.

MACOM products are not intended for use in medical, lifesaving or life sustaining applications. MACOM customers using or selling MACOM products for use in such applications do so at their own risk and agree to fully indemnify MACOM for any damages resulting from such improper use or sale.