MAFL-008195-CD0AC0

CATV Diplex Filter 50 - 870 / 950 - 1550 / 2000 - 3000 MHz

Features

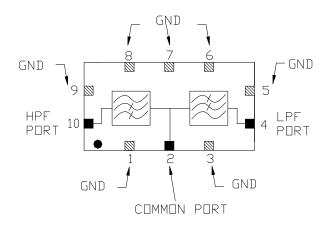
- 75 Ohm
- SMT unit
- RoHS Compliant

Description

M/A-COM's MAFL-008195-CD0AC0 is a surface mount diplex filter unit designed for MoCA applications.

M /A -COM DC-0819 MAFL-008195-CD0AC0 HP VOODO2A

Functional Schematic



Pin Configuration

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

Absolute Maximum Ratings ^{1,2}

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

1. Exceeding any one or combination of these limits may cause permanent damage to this device.

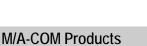
 M/A-COM does not recommend sustained operation near these survivability limits.

1

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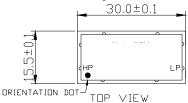


CATV Diplex Filter

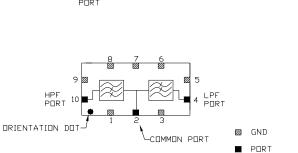
50 - 870 / 950 - 1550 / 2000 - 3000 MHz

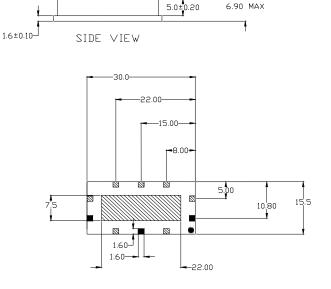
M/A-COM Products Rev. V1

SM-172 Case Style

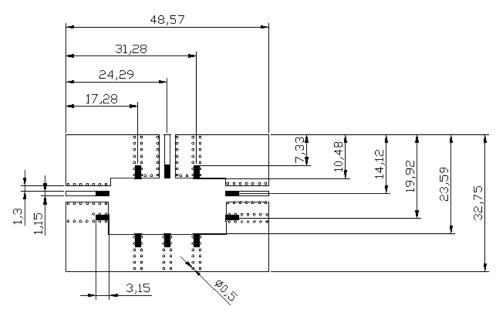


COMMON PORT





Recommended PCB Configuration



NOTE: Substrate is 1.6mm thick FR4

Dimensions in mm. Tolerance: .x \pm 0.1, .xx \pm 0.05

2

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CATV Diplex Filter

50 - 870 / 950 - 1550 / 2000 - 3000 MHz

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Electrical Specifications: $T_A = 25^{\circ}C$, $Z_0 = 75\Omega^{-1}$

Parameter	Test Conditions	Units	Min	Тур	Max
Frequency Range	50 - 870 / 950 - 1550 / 2000 - 3000	MHz			
Common to Low Insertion Loss	50 - 870MHz	dB	-	1.5	2.5
Common to Low Stop band Rejection	950 - 975MHz 975 - 1055 MHz 1055 - 1550MHz 1790 - 2100MHz	dB dB dB dB	30 35 40 20	37 40 45 30	- - -
Common to High Stop band Rejection	50 - 860MHz 860 - 870MHz	dB dB	40 37.5	44 39	-
Common to High Insertion Loss	950 - 1125MHz 1125 - 1550MHz	dB dB	-	2.0 1.0	2.75 2.0
Common to High Stop band Rejection	2000 - 3000MHz	dB	17.5	22	-
Common Port Return Loss	50 - 300MHz 300 - 600MHz 600 - 870MHz	dB dB dB	16 14 12	25 18 14	
	950 - 1400MHz 1400 - 1550MHz	dB dB	14 10	20 12	-

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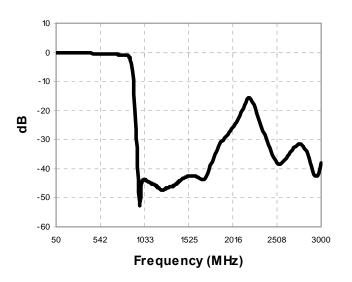
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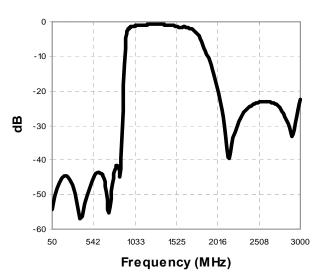
CATV Diplex Filter 50 - 870 / 950 - 1550 / 2000 - 3000 MHz

Typical Performance Curves

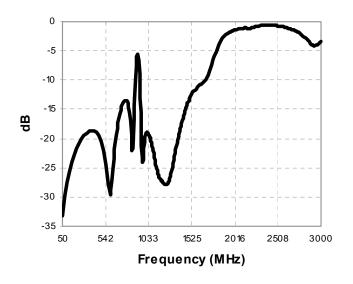
Common to Low Pass Filter



Common to High Pass Filter



Common Port Return Loss



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