



MAFL-007898-CD0AC0

V1

Features

- 75 Ohm
- SMT unit
- RoHS* Compliant

CATV Diplex Filter

Description

M/A-COM's MAFL-007898-CD0AC0 is a surface mount diplex filter unit designed for MoCA applications.

50 - 870 / 975 - 1525 / 2000 - 3000MHz

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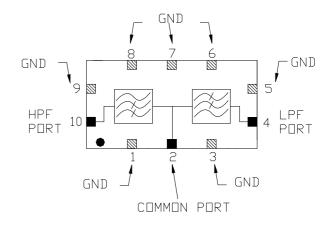
Absolute Maximum Ratings ^{1,2}

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.

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

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	-		

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

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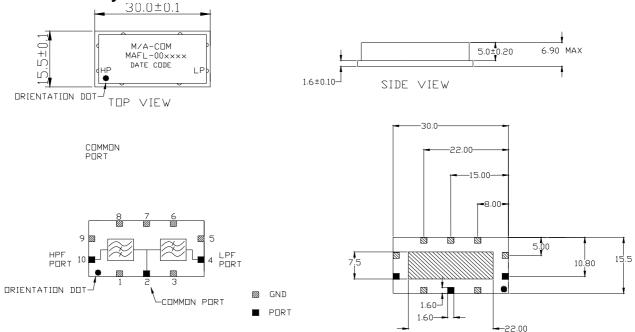


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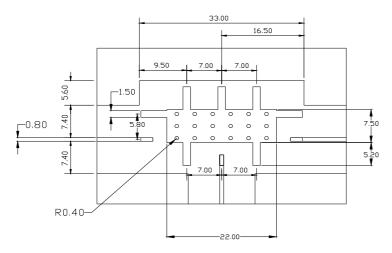
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SM-172 Case Style



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

Recommended PCB Configuration



NOTE: SUBSTRATE IS 1.6MM THICK FR4 WITH GND PATTERN UNDER UNIT ON TOP LAYER CONNECTED TO FULL GND PLANE ON BOTTOM LAYER

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

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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 / 975 - 1525 / 2000 - 3000	MHz			
Common to Low Insertion Loss	50 - 750MHz 750 - 870MHz	dB dB		0.9 1.8	1.5 2.5
Stopband Rejection	975 - 1025MHz 1025 - 1350MHz 1350 - 1525MHz	dB dB dB	35 40 37	42 45 42	
	1790 - 2100MHz	dB	20	30	-
Common to High Insertion Loss	975 - 1525MHz	dB	-	1.2	2.5
Stopband Rejection	50 - 750MHz 750 - 870MHz 2000 - 3000MHz	dB dB dB	40 34 15	45 40 20	-
Low to High Isolation	50 - 750MHz 750 - 870MHz 975 - 1025MHz 1025 - 1350MHz 1350 - 1525MHz	dB dB dB dB dB dB	40 34 35 40 37	45 40 42 45 30	
Common Port Return Loss	50 - 300MHz 301 - 600MHz 601 - 870MHz 975 - 1525MHz	dB dB dB dB	13 12 10 10	15 15 15 14	- - - -

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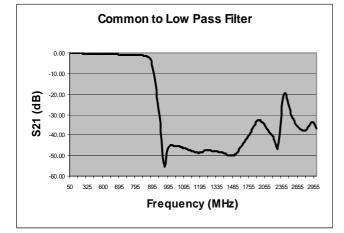


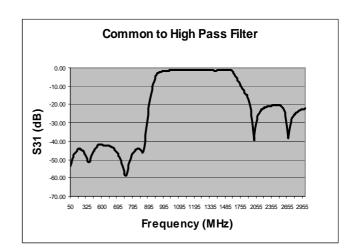
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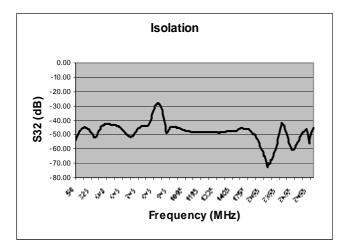
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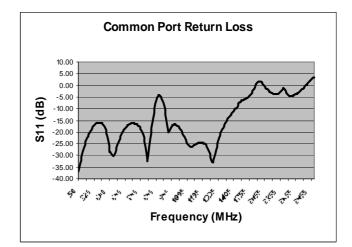
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Typical Performance Curves









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