

CATV Diplex Filter 5-42 / 54-1002 MHz

Rev. V2

Features

- 75 Ohm
- SMT unit
- RoHS Compliant

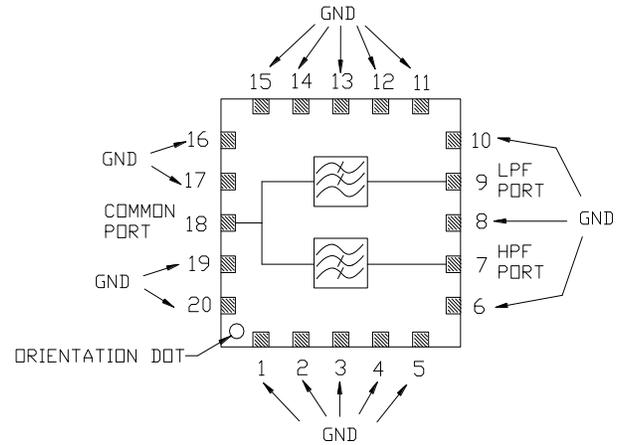
Description

- M/A-COM Technology Solutions MAFL-011015 is a Low Cost, surface mount Diplex Filter unit designed for CATV, DTV and DBS applications.

Ordering Information

Part Number	Package
MAFL-011015	200

Functional Schematic



Recommended Maximum Ratings

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

Pin Configuration

Function	Pin Number
Common Port	18
Low Pass Port	9
High Pass Port	7
Ground	1 - 6, 8, 10-17, 19, 20
Not connected	-

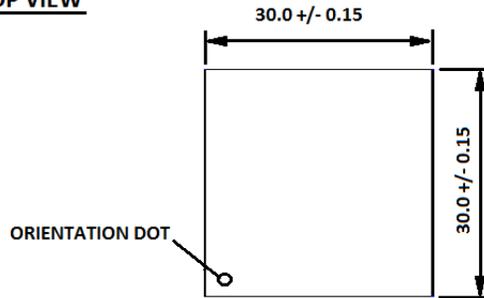
Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$

Parameter	Units	Min	Typ	Max
Insertion Loss 5 - 42 MHz 54 - 1002 MHz	dB	-	0.5	1.2
	dB	-	0.5	1.2
Filter Rejection 5 - 42 MHz 54 - 1002 MHz	dB	50	55	-
	dB	50	55	-
Filter Return Loss 5 - 42 MHz 54 - 1002 MHz	dB	14	20	-
	dB	14	18	-
Filter Isolation 5 - 42 MHz 54-60MHz 60 - 890 MHz 890-1002 MHz	dB	50	-	-
	dB	48	55	-
	dB	50	55	-
	dB	45	-	-

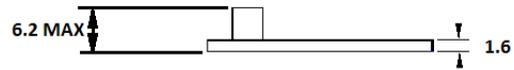
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Outline Drawing

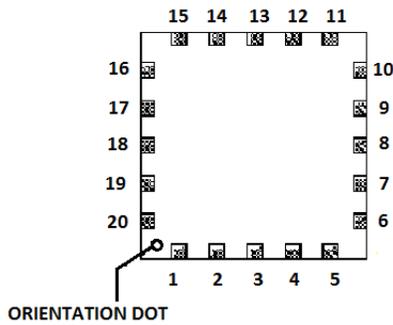
TOP VIEW



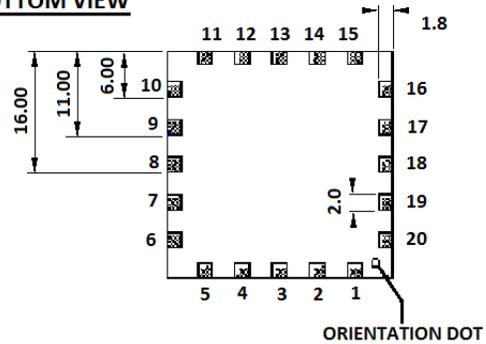
SIDE VIEW



PCB TOP VIEW

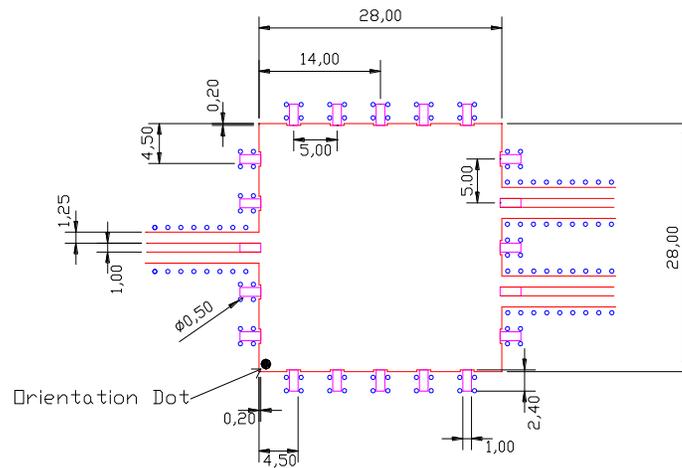


PCB BOTTOM VIEW



Dimensions in mm

Recommended PCB Configuration



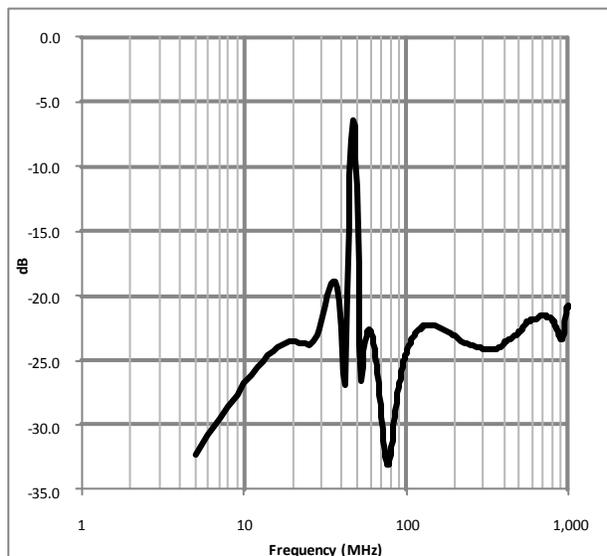
Dimensions in mm

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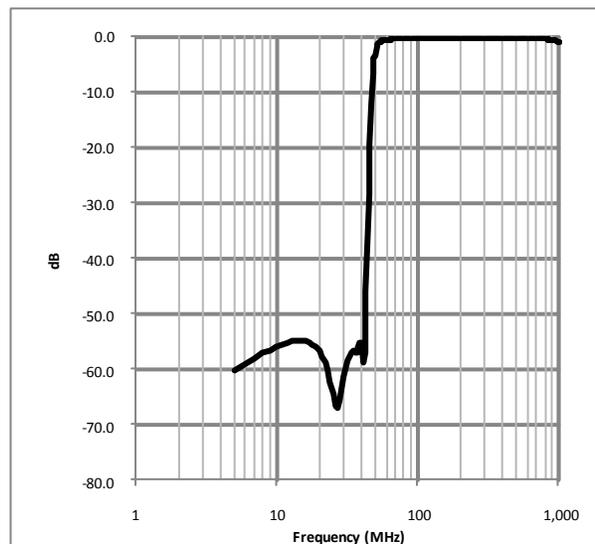
Rev. V2

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

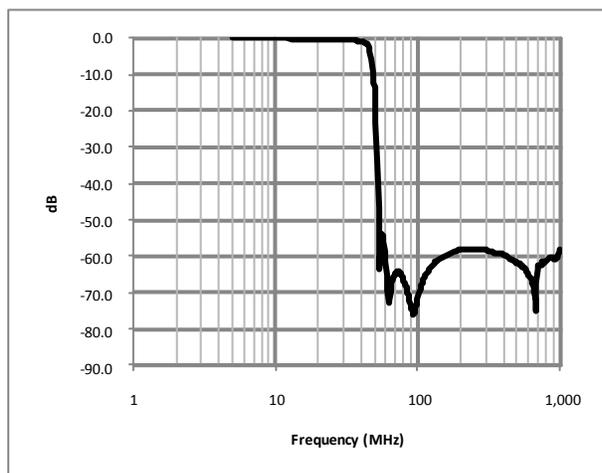
Input Port Return Loss



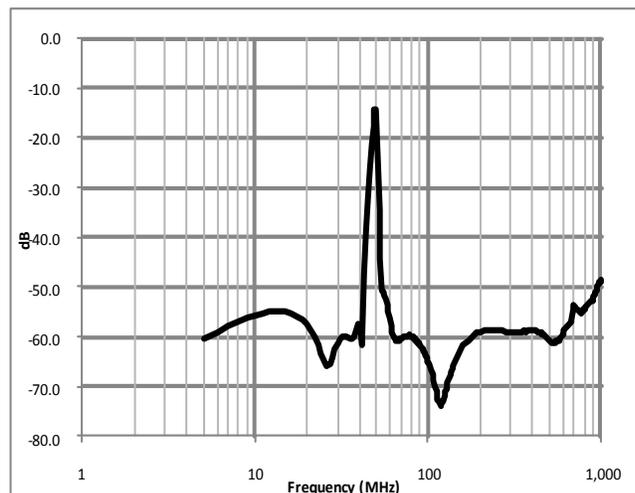
High Pass Filter Insertion Loss



Low Pass Filter Insertion Loss



Filter Isolation



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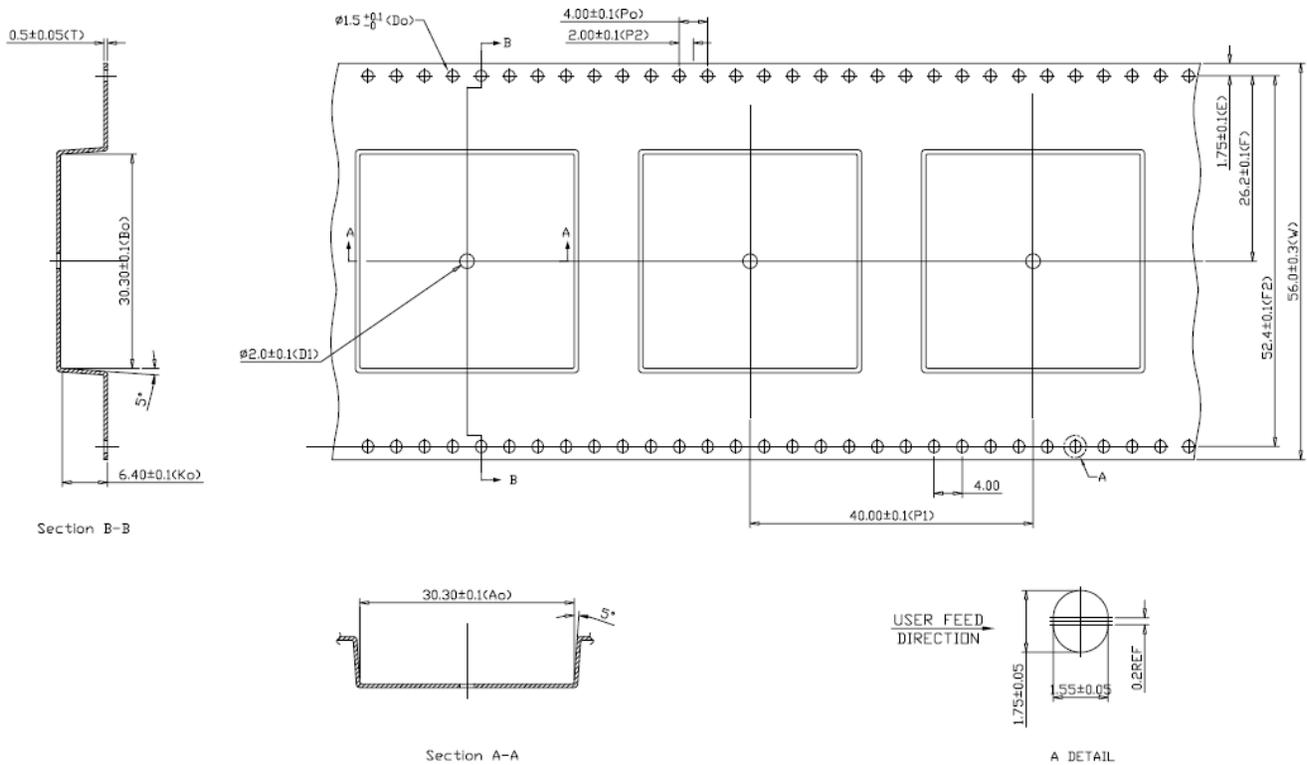
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Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	200
Reel Size	mm	330
Tape Width	mm	56.00
Pitch	mm	40.00
Ao	mm	30.3
Bo	mm	30.3
Ko	mm	6.4
Orientation	-	F30
Reference Application Note ANI-019 for orientation		

Ordering Information

Part Number	Package
MAFL-011015	Tape & Reel



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