

CATV Diplex Filter 5-65 / 88-1000 MHz

Released - Rev. V2

Features

- 75 Ohm
- SMT unit
- RoHS Compliant
- RoHS version of MAFLCT0027

Description

- M/A-COM Technology Solutions MAFL-007988-CD0550 is a Low Cost, Non Hermetically Sealed surface mount Diplex Filter unit designed for CATV, DTV and DBS applications.



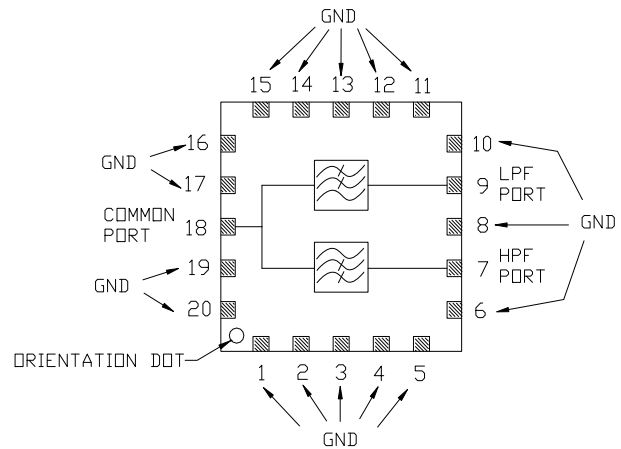
Ordering Information

Part Number	Package
MAFL-007988-CD0550	50 Piece Reel
MAFL-007988-CD05TB	Customer Test Board

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

Functional Schematic



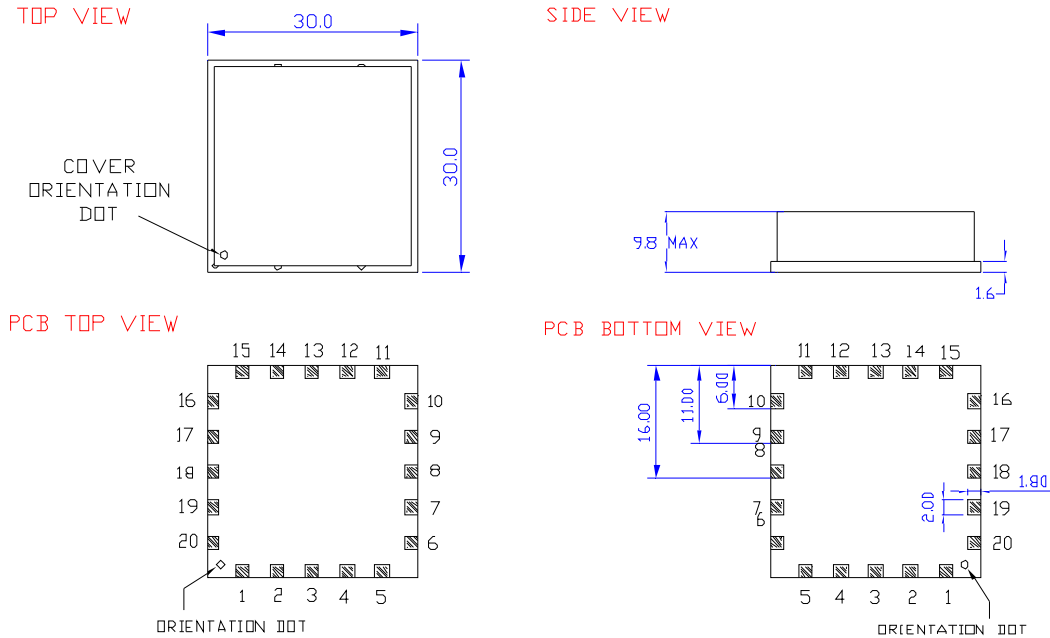
Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$

Parameter	Units	Min	Typ	Max
Low side to Common				
Insertion Loss				
5 - 65 MHz	dB	-	0.5	1.0
Return Loss				
5 - 65 MHz	dB	17	20	-
Rejection				
88 - 1000 MHz	dB	45	50	-
High side to Common				
Insertion Loss				
88 - 1000 MHz	dB	-	0.5	1.2
Return Loss				
88 - 1000 MHz	dB	17	20	-
Rejection				
5 - 65 MHz	dB	45	50	-
Low side to High side				
Isolation				
5 - 65 MHz	dB	45	50	-
88 - 1000 MHz	dB	45	50	-

Pin Configuration

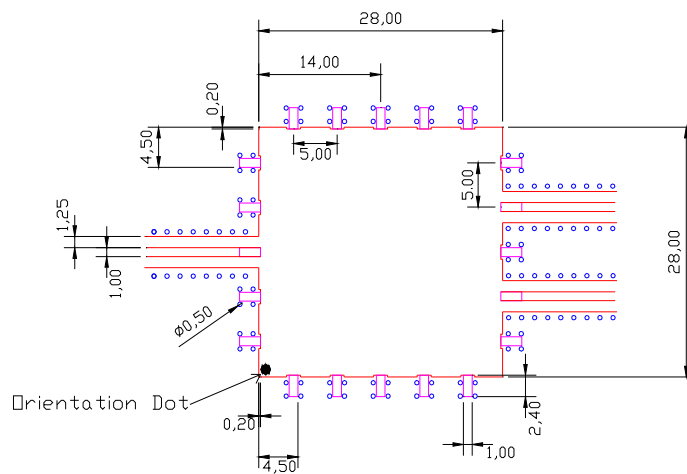
Function	Pin Number
Common Port	18
Low Pass Port	9
High Pass Port	7
Ground	1 - 6, 8, 10-17, 19, 20
Not connected	-

Outline Drawing - SM-85



Dimensions in mm

Recommended PCB Configuration



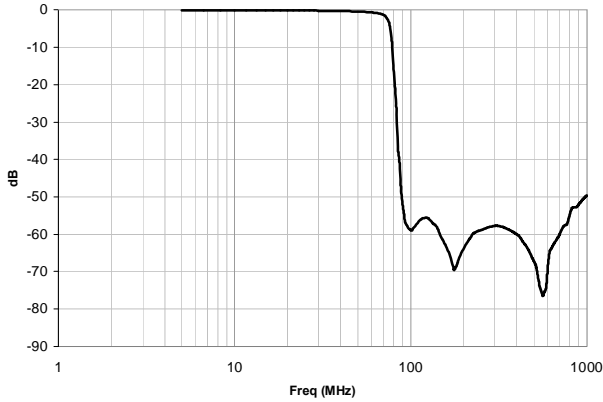
Dimensions in mm

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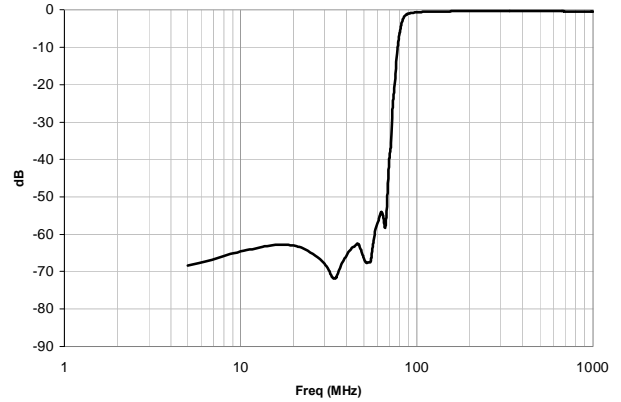
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Typical Performance: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$

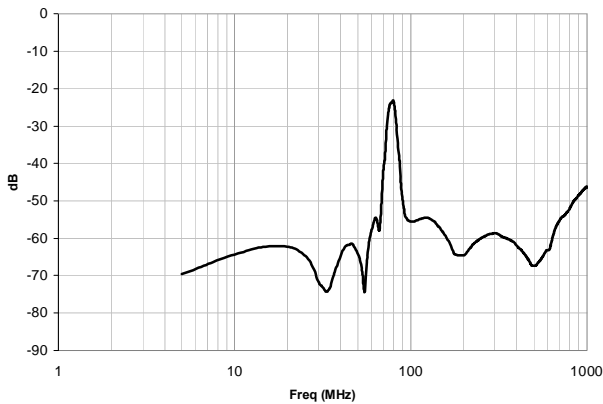
Low Pass Filter Insertion Loss



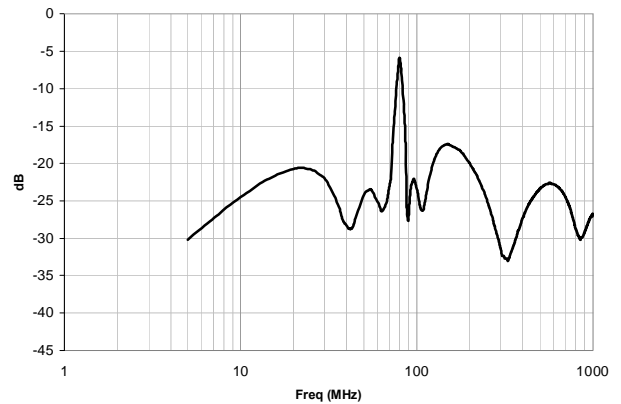
High Pass Filter Insertion Loss



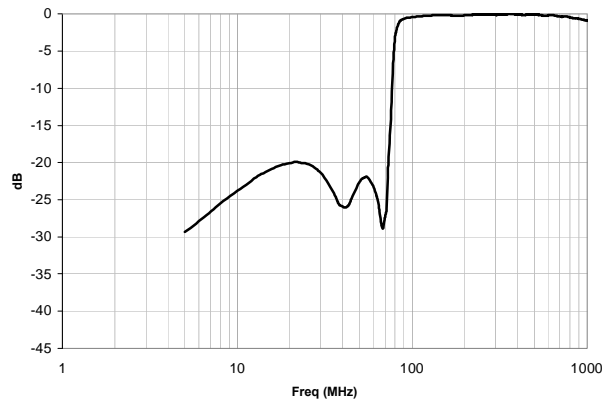
Low Side to High Side Isolation



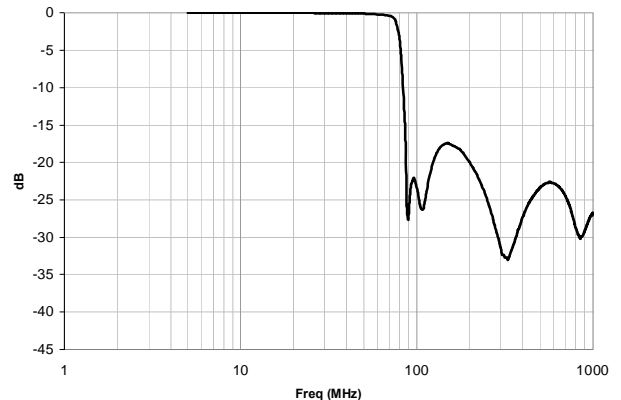
Input Port Return Loss



Low Pass Port Return Loss



High Pass Port Return Loss



ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

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