



CATV Diplex Filter 5 –65 / 88– 1000 MHz

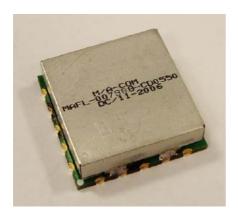
MAFL-007988-CD0550

#### **Features**

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

#### **Description**

M/A-COM's MAFL-007988-CD0550 is a Low Cost, Non Hermetically Sealed Diplex Filter unit designed for CATV, DTV and DBS applications. The technology used in the design of this unit is patent pending.

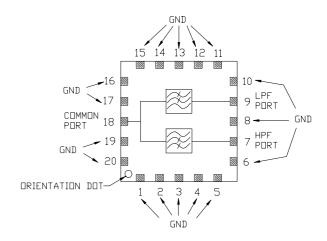


## **Absolute Maximum Ratings <sup>1,2</sup>**

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.

#### **Functional Schematic**



### **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	-			

### **Ordering Information**

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

<sup>\*</sup> Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

North America Tel: 800.366.2266 / Fax: 978.366.2266

<sup>•</sup> Europe Tel: 44.1908.574.200 / Fax: 44.1908.574.300

Asia/Pacific Tel: 81.44.844.8296 / Fax: 81.44.844.8298

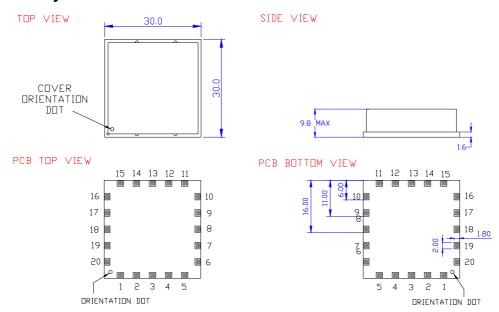




CATV Diplex Filter 5 –65 / 88– 1000 MHz

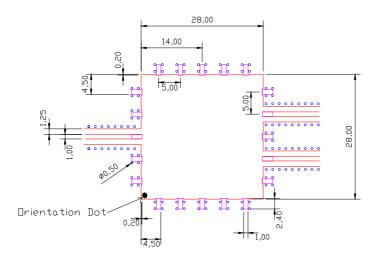
MAFL-007988-CD0550

#### SM-85 Case Style



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

### **Recommended PCB Configuration**



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

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MAFL-007988-CD0550 V1

## Electrical Specifications: $T_A = 25$ °C, $Z_0 = 75\Omega$

Parameter	Test Conditions	Units	Min.	Тур.	Max.
Frequency Range	5—65 MHz / 88– 1000MHz				
Low Pass Filter Insertion Loss:	5 – 65 MHz	dB	-	0.5	1.0
High Pass Filter Insertion Loss:	88 – 1000 MHz	dB	-	0.5	1.2
Filter Isolation	5 – 65 MHz	dB	45	50	-
Filter Isolation	88 – 1000 MHz	dB	45	50	-
Input Return Loss	5 – 65 MHz	dB	17	20	-
Input Return Loss	88 – 1000 MHz	dB	17	20	-

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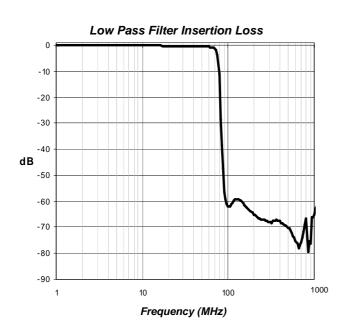


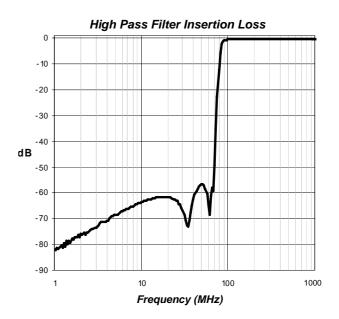


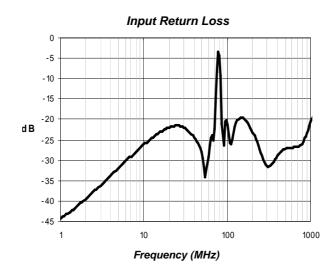
CATV Diplex Filter 5 –65 / 88– 1000 MHz

MAFL-007988-CD0550 V1

### **Typical Performance**







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