

**CATV Diplex Filter**  
5 - 65 / 88 - 1000MHz

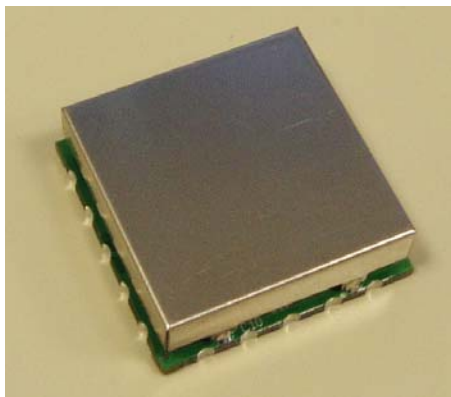
**MAFLCT0027**  
**V1**

**Features**

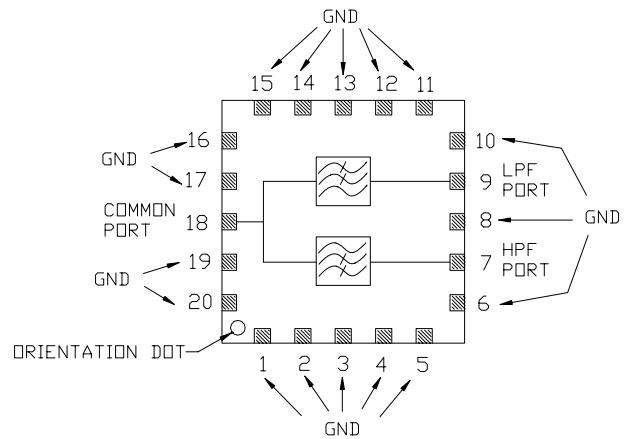
- 75 Ohm
- SMT unit
- Available on Tape and Reel. Reel quantity 50

**Description**

M/A-COM's MAFLCT0027 is a very low cost, small size, non-hermetically sealed filter unit designed for CATV, DTV and DBS applications. The technology used in the design of this unit is patent pending.



**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	-

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

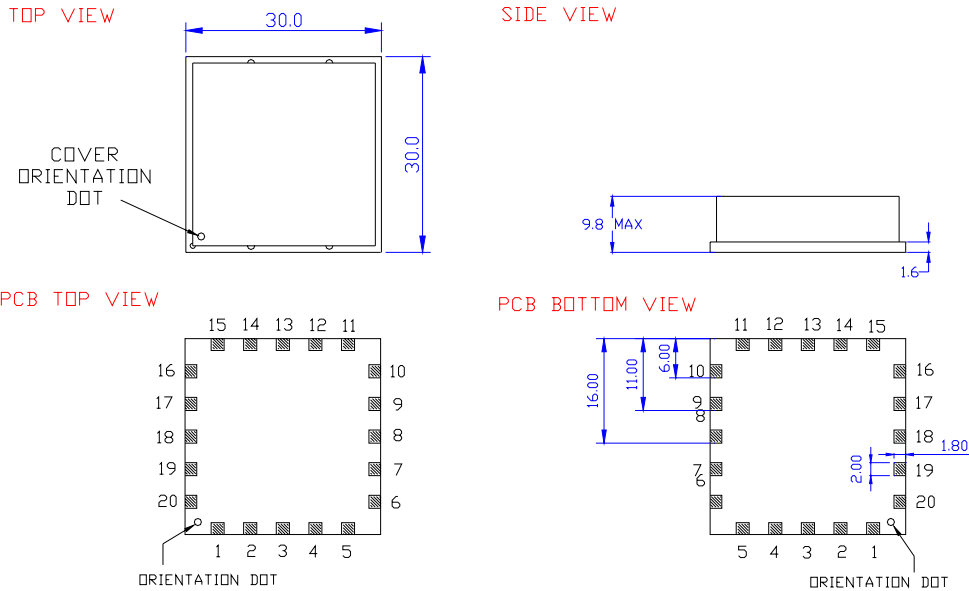
**Ordering Information**

Part Number	Package
MAFLCT0027	50 Piece Reel
MAFL-007988-0027TB	Customer Test Board

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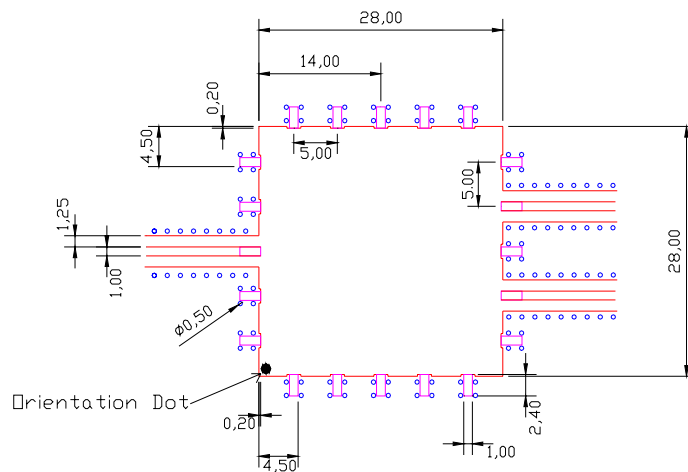
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**SM-85 Case Style**



Dimensions in mm. Tolerance: .x ± 0.1, .xx ± 0.05

**Recommended PCB Configuration**



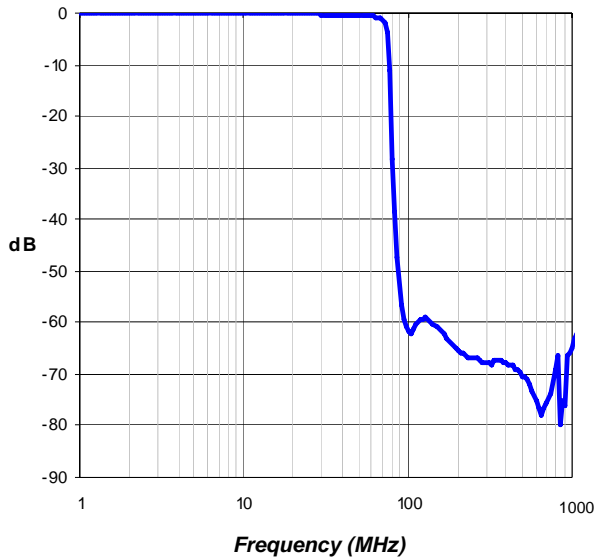
Dimensions in mm. Tolerance: .x ± 0.1, .xx ± 0.05

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

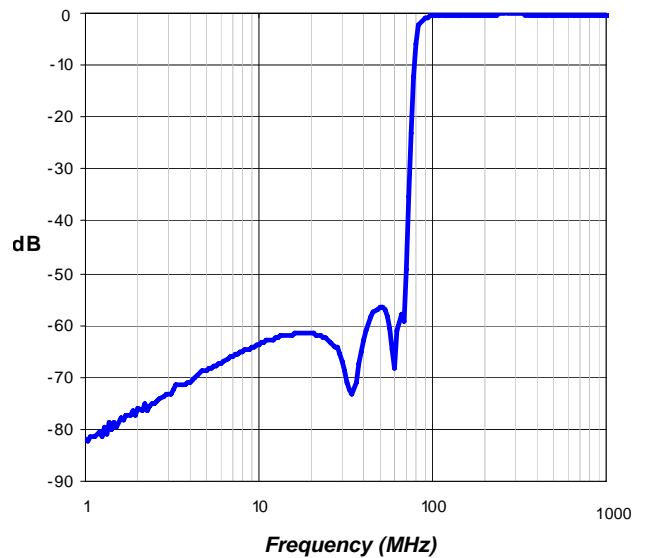
Parameter	Units	Min.	Typ.	Max.
Frequency Range 5 – 1000 MHz				
Low Pass Cutoff 65	MHz	-	-	-
High Pass Cutoff 88	MHz	-	-	-
Insertion Loss (Pass Band)				
5 – 65 MHz	dB	-	0.5	1.0
88 – 1000 MHz	dB	-	0.5	1.2
Insertion Loss (Stop Band)				
5 – 65 MHz	dB	45	50	-
88 – 1000 MHz	dB	45	50	-
Return Loss Input Port				
5 – 65 MHz	dB	17	20	-
88 – 1000 MHz	dB	17	20	-

**Typical Performance Curves**

*Low Pass Filter Insertion Loss*



*High Pass Filter Insertion Loss*



*Input Return Loss*

