

CATV Diplex Filter
5 - 65 / 88 - 1000MHz

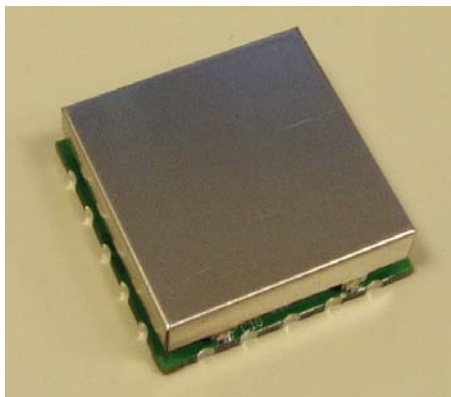
MAFLCT0027
V1

Features

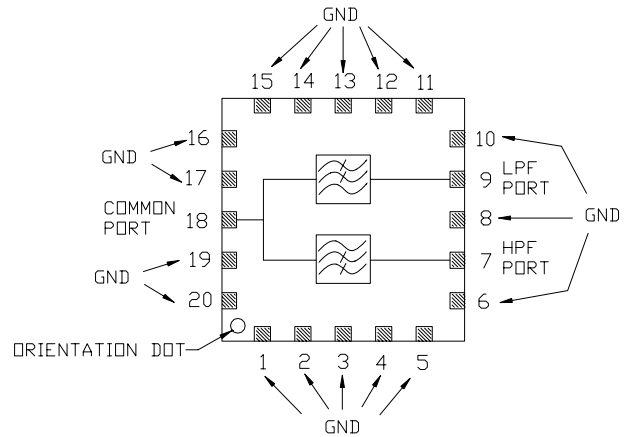
- 75 Ohm
- SMT unit
- Available on Tape and Reel. Reel quantity 50

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 ^{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.

Ordering Information

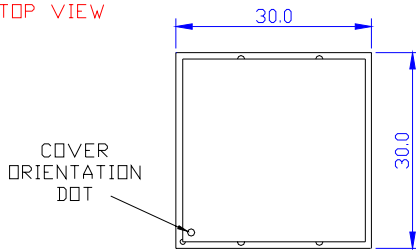
Part Number	Package
MAFLCT0027	50 Piece Reel
MAFL-007988-0027TB	Customer Test Board

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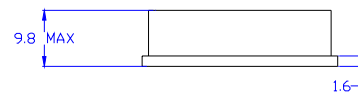
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SM-85 Case Style

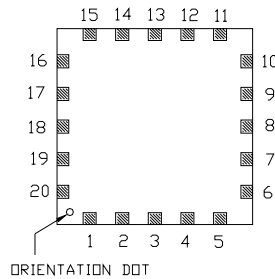
TOP VIEW



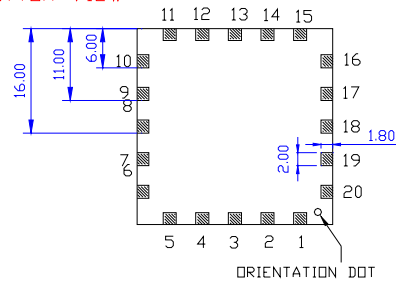
SIDE VIEW



PCB TOP VIEW

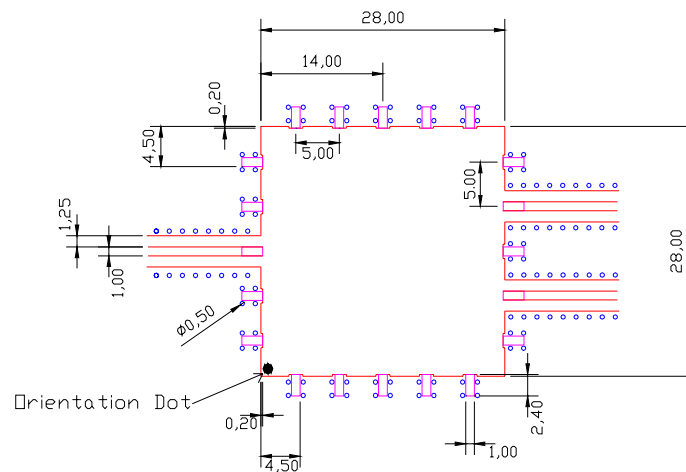


PCB BOTTOM VIEW



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

Recommended PCB Configuration



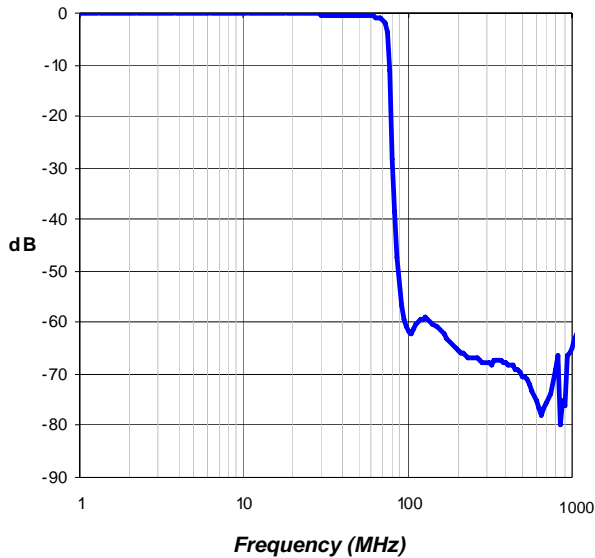
Dimensions in mm. Tolerance: .x ± 0.1, .xx ± 0.05

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

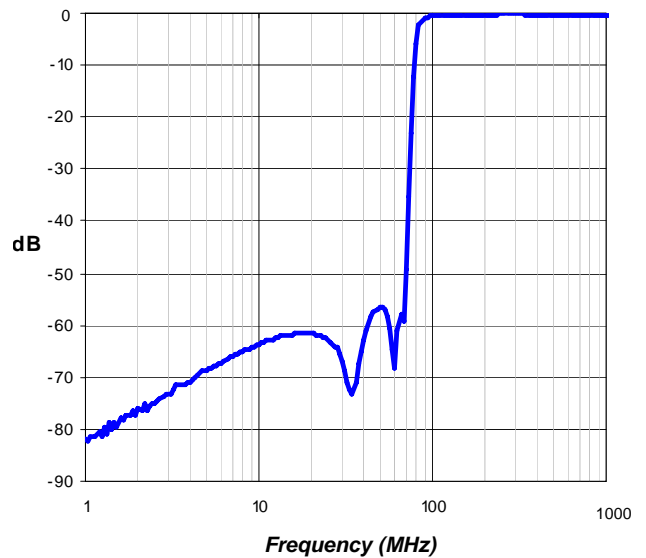
Parameter	Units	Min.	Typ.	Max.
Frequency Range 5 – 1000 MHz				
Low Pass Cutoff 65	MHz	-	-	-
High Pass Cutoff 88	MHz	-	-	-
Insertion Loss (Pass Band)				
5 – 65 MHz	dB	-	0.5	1.0
88 – 1000 MHz	dB	-	0.5	1.2
Insertion Loss (Stop Band)				
5 – 65 MHz	dB	45	50	-
88 – 1000 MHz	dB	45	50	-
Return Loss Input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

