Broadband CATV Diplexer

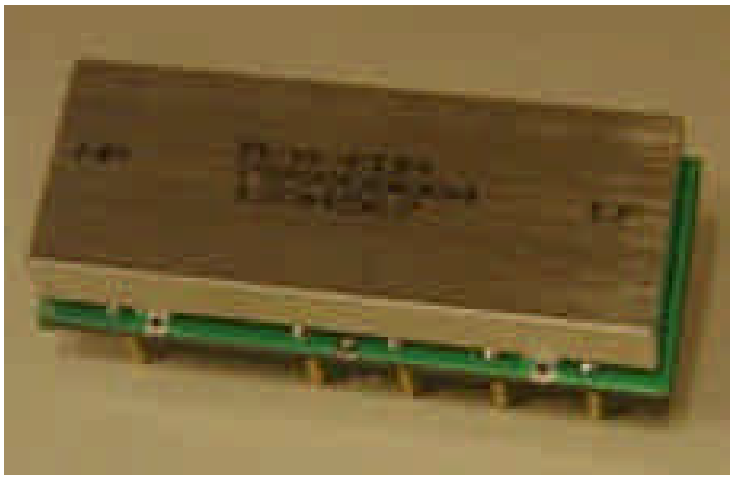
V 2

5 – 870 MHz

MAFLCT0006

Features

- 75 ohm
- Plug-in unit
- Excellent temperature stability
- Excellent repeatability



Description

M/A-COM's MAFLCT0006 is a low cost, plug-in diplex filter unit designed for CATV node and line amplifier applications. The technology in use in this design is patent pending.

Electrical Specifications @ 25°C, 75 ohm

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Frequency Range	5-65 / 85-870MHz				
Insertion Loss[1]	5-65 MHz 85-870 MHz	dB		1.0 1.0	1.1 1.1
Isolation	5-65 MHz 66-84 MHz 85 -870 MHz	dB	50 33 48	54 36 52	
Input Port Return Loss	5-65 MHz 85-870 MHz	dB	20 20	22 22	

1 Flatness is included in the insertion loss measurement

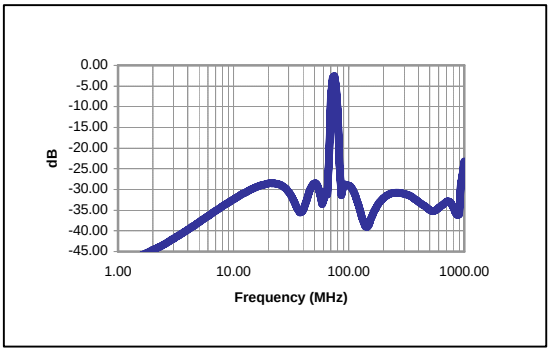
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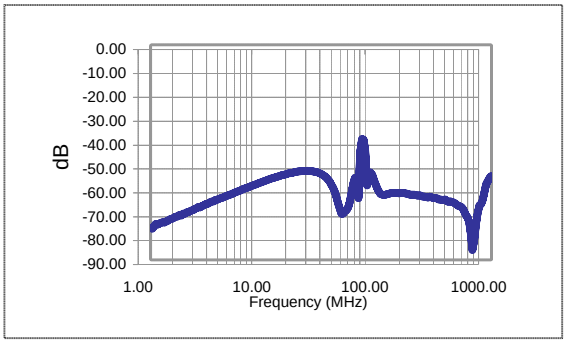
■ **North America:** Tel. (800) 366-266, Fax (800) 618-8883
■ **Asia/Pacific:** Tel.+ 81-44-844-8296, Fax+81-44-844-8298
■ **Europe:** Tel. +44(1908) 574 200, Fax +44(1908) 574 300

Typical Performance @ +25° C

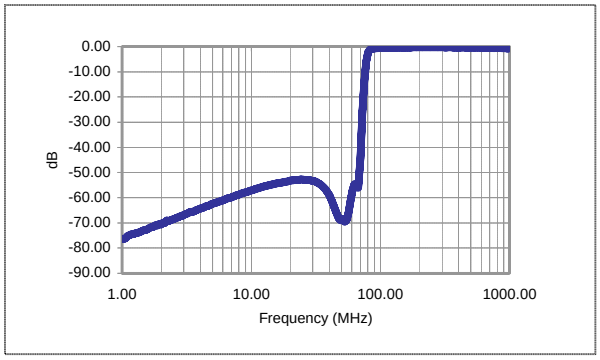
Input Return Loss



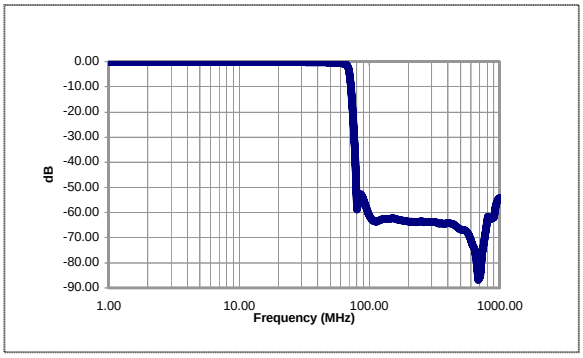
Isolation



High Pass Filter Insertion Loss



Low Pass Filter Insertion Loss



Absolute Maximum Ratings [2]

	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating/Storage Temperature	-40° C to +85° C

2 Exceeding one or a combination of these settings may cause permanent damage to the unit

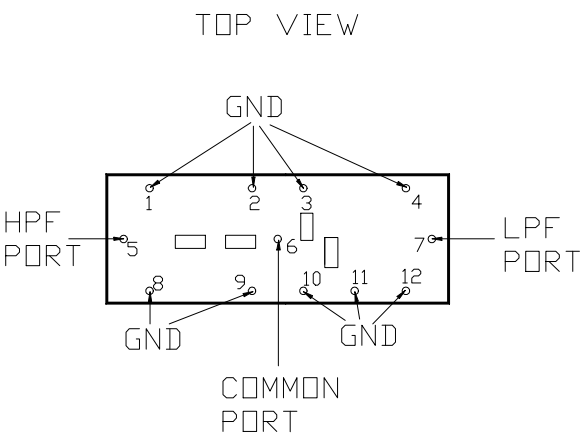
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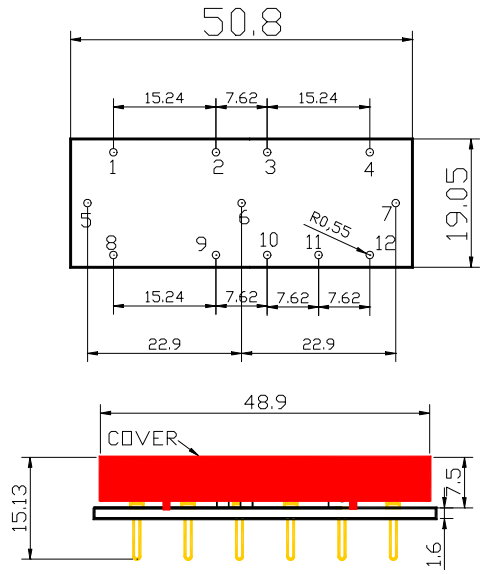
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Functional Schematic



SM-145 Case Style



Pin Configuration

Function	Pin No.
Common Port	6
Low Pass Port	7
High Pass Port	5
Ground	1-4, 8-12
Not Connected	-

Additional Specifications	Group Delay (nSec) TYP	MAX
61.5 – 63 MHz	3ns	5ns
87 – 90.5 MHz	5ns	8ns

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