

Broadband CATV Diplexer

V2P

5 – 1000 MHz

MAFLES0018

MAFLES0018

Features

- 75 ohm
- SMT unit
- Excellent temperature stability
- Excellent repeatability

Description

M/A-COM's MAFLES0018 is a low cost, SMT diplex filter unit designed for CATV, DTV, DBS, cable modem and set top box applications.

The technology used in this design is patent pending.

**Electrical Specifications @ 25°C, 75 ohm**

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Frequency Range:	5- 42 / 54-1000MHz				
Insertion Loss	5-42 MHz 54-1000 MHz	dB		0.5 0.5	1.1 1.2
Isolation	5-37 MHz 37-42 MHz 42-54 MHz 54-100 MHz 100-600 MHz 600-1000 MHz	dB	50 43 16 45 50 45	55 48 19 50 55 50	
Input Port Return Loss	5-42 MHz 54-1000 MHz	dB	12 12	16 16	

M/A-COM Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice

Visit www.macom.com for additional data sheets and product information

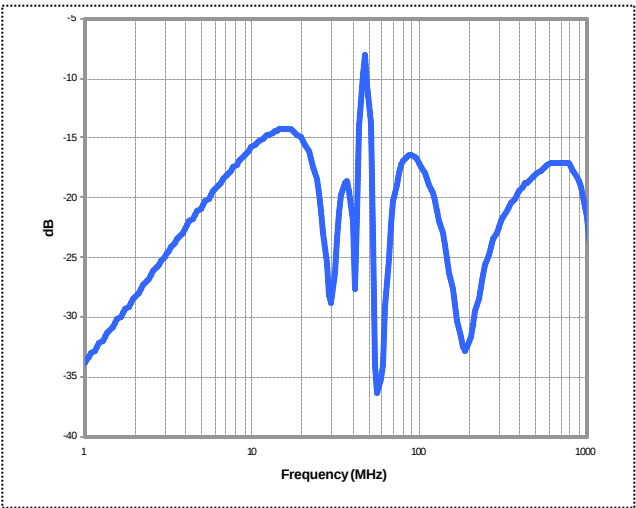
■ North America: Tel. (800) 366-266, Fax (800) 618-8883

■ Asia/Pacific: Tel.+ 81-44-844-8296, Fax+81-44-844-8298

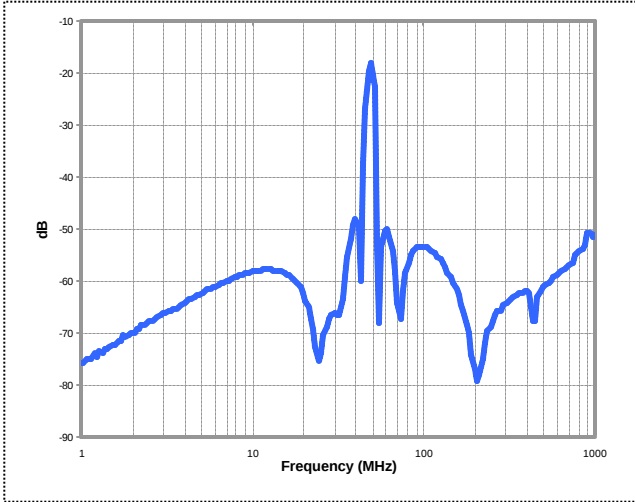
■ Europe: Tel. +44(1908) 574 200, Fax +44(1908) 574 300

Typical Performance @ +25° C

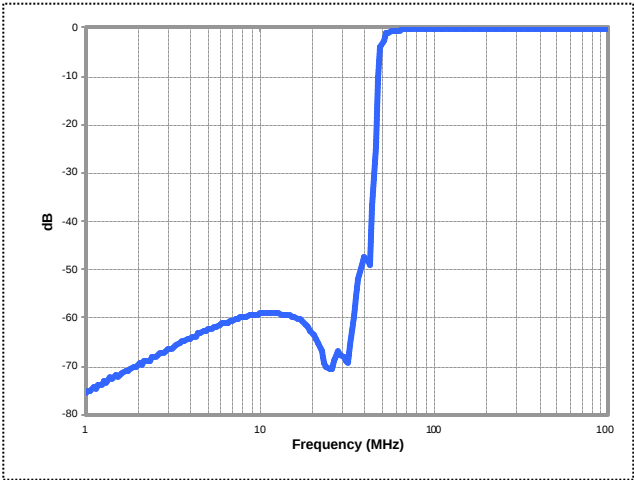
Input Return Loss



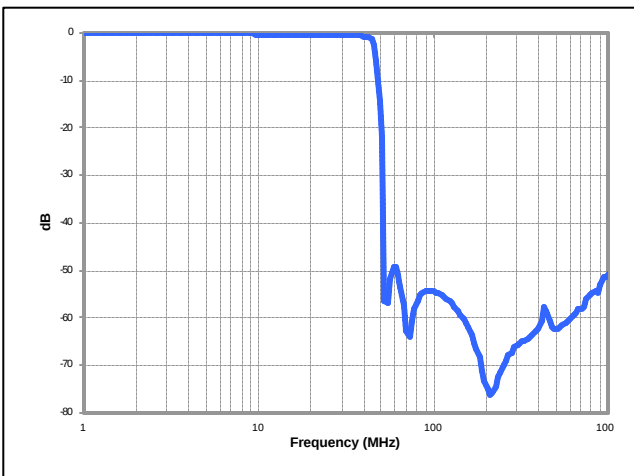
Isolation



High Pass Filter Insertion Loss



Low Pass Filter Insertion Loss



Absolute Maximum Ratings ¹

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

¹ Exceeding one or a combination of these settings may cause permanent damage to the unit

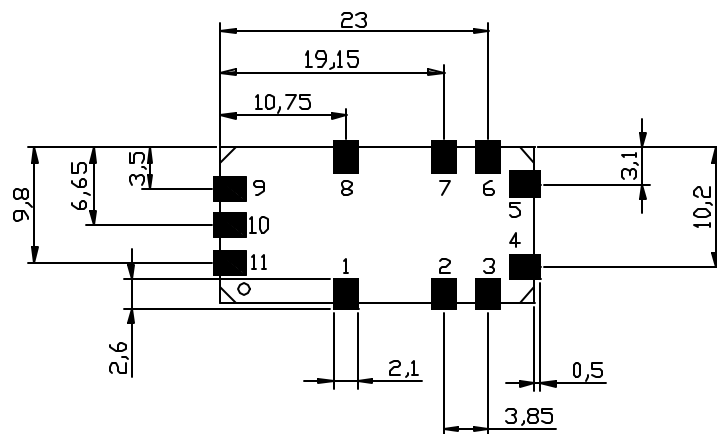
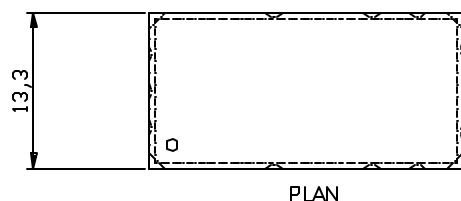
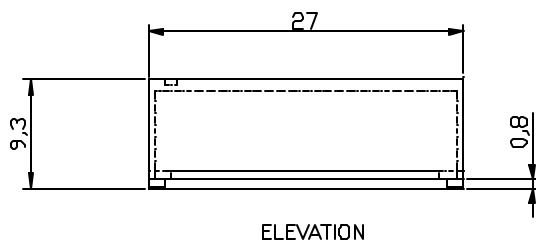
M/A-COM Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice

Visit www.macom.com for additional data sheets and product information



■ 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



Case Style: SM-162**Pin Configuration**

Function	Pin No.
Common Port	10
Low Pass Port	3
High Pass Port	6
Ground	1,2,4,5,7,8,9,11
Not Connected	-

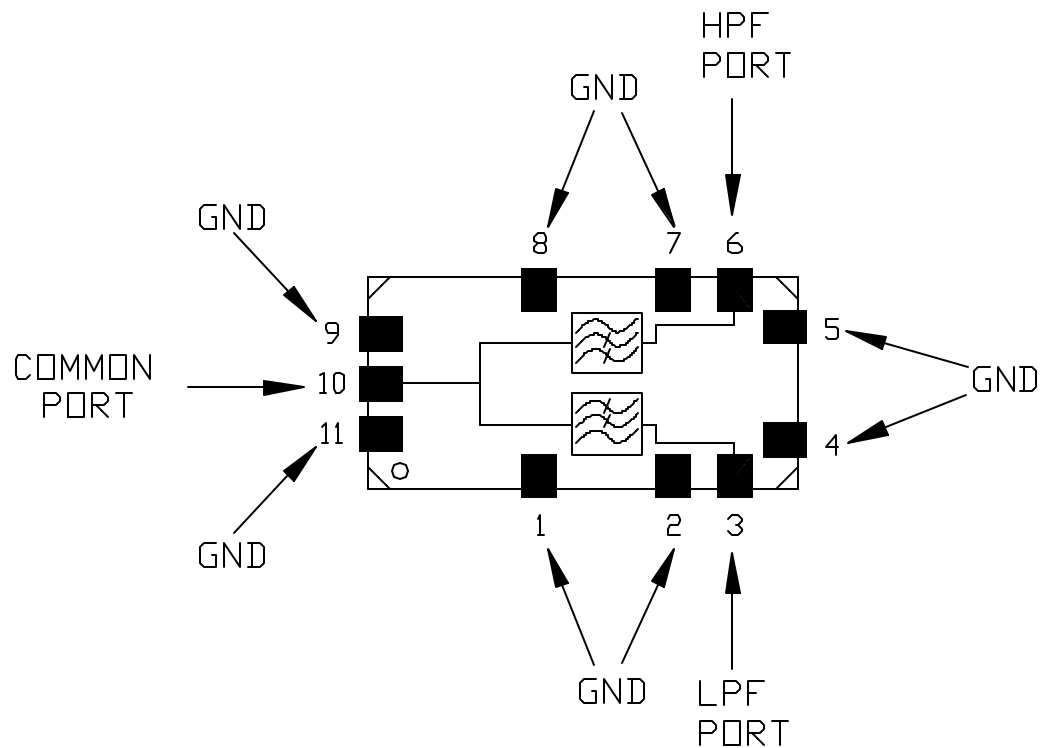
Additional Specifications	Group Delay (nSec)	
	TYP	MAX
40.5 – 42 MHz	5ns	20ns
54 – 55.5 MHz	10ns	20ns

M/A-COM Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice

Visit www.macom.com for additional data sheets and product information

■ 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

Functional Schematic



M/A-COM Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice

Visit www.macom.com for additional data sheets and product information

■ 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