Broadband CATV Diplexer

5 – 1000 MHz

V2P

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	

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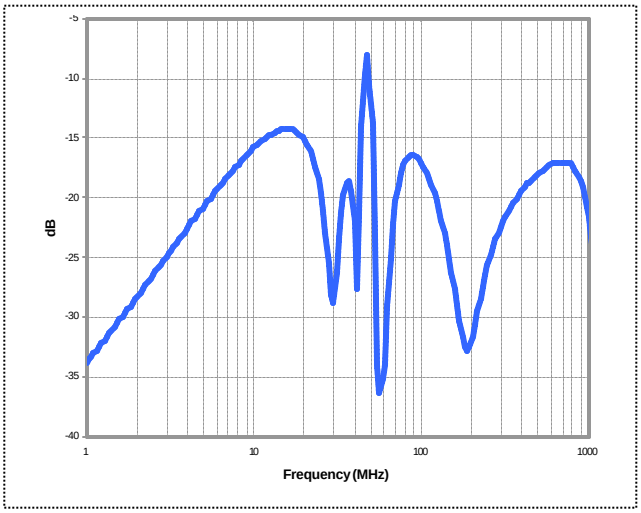
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- **North America:** Tel. (800) 366-266, Fax (800) 618-8883
- **Asia/Pacific:** Tel.+ 81-44-844-8296, Fax+81-44-844-8298
- **Europe:** Tel. +44(1908) 574 200, Fax +44(1908) 574 300

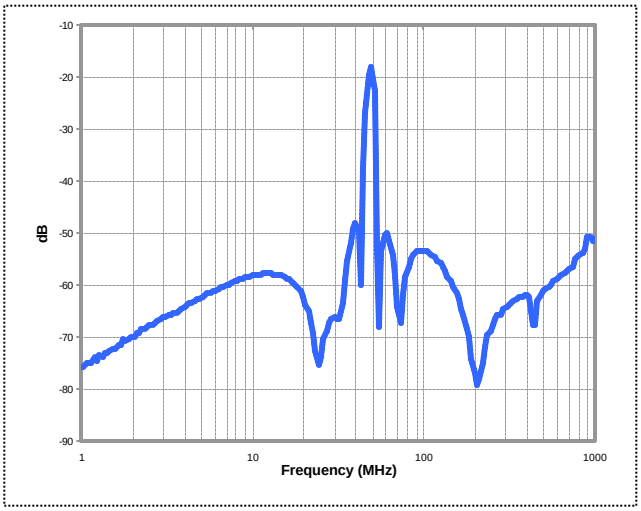
tyco / Electronics MA-COM

Typical Performance @ +25° C

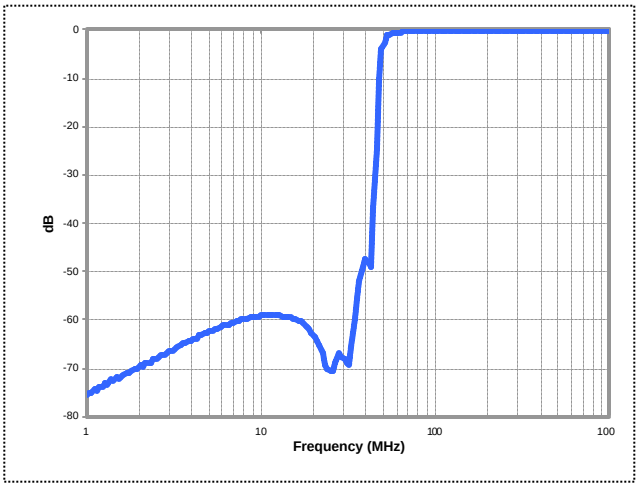
Input Return Loss



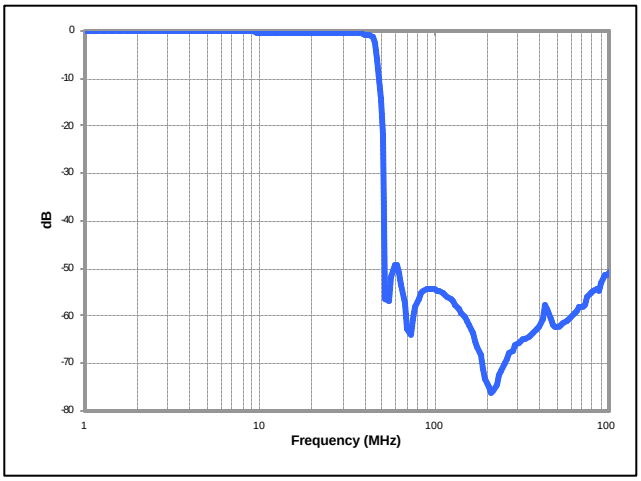
Isolation



High Pass Filter Insertion Loss



Low Pass Filter Insertion Loss



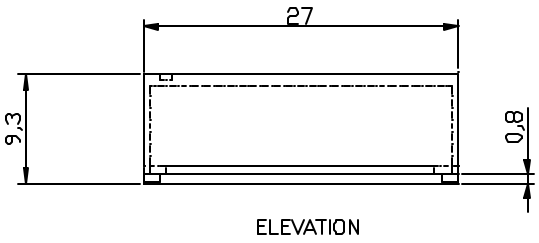
Absolute Maximum Ratings [1]

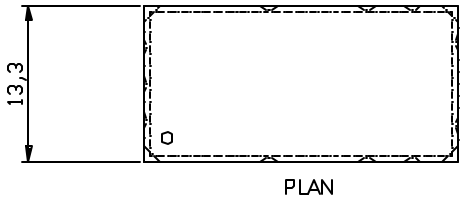
	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating/Storage Temperature	-40° C to +85° C

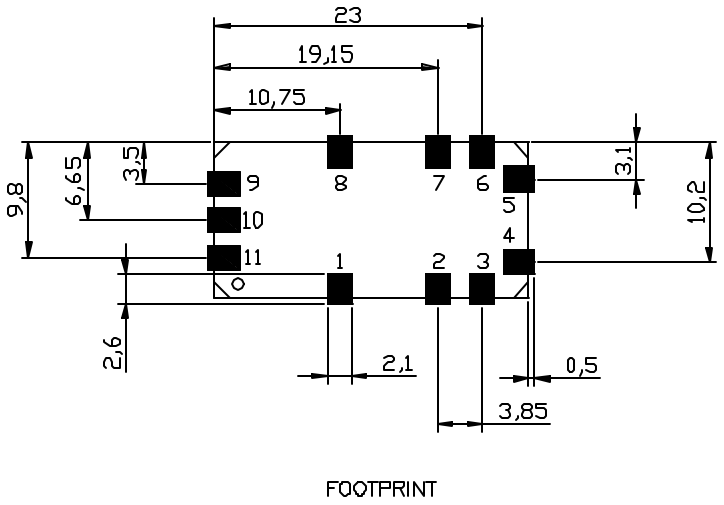
1 Exceeding one or a combination of these settings may cause permanent damage to the unit

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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

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Functional Schematic

