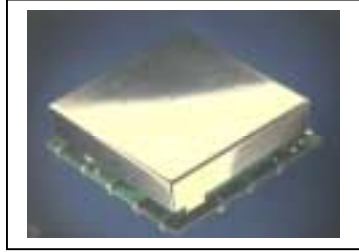


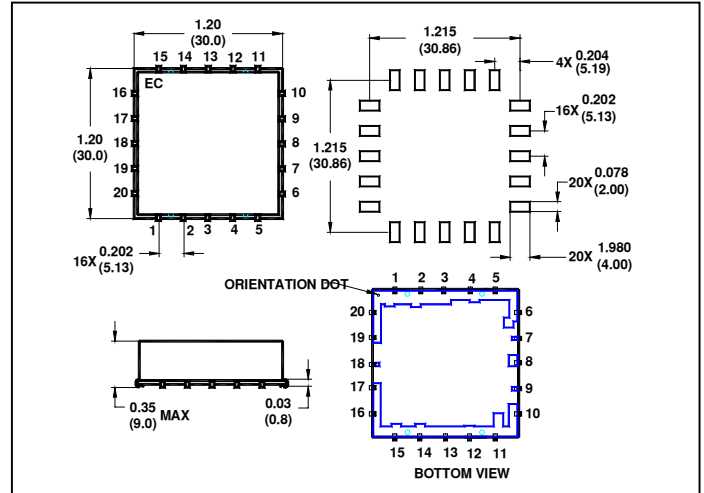
# E-Series Diplexer

## 5 – 1000 MHz

MAFLES0083



SM-85 Case Style



### Features

- Surface Mount
- Impedance 75 Ohms Nominal

### Description

M/A-COM's MAFLES0083 is a Low Cost, Non Hermetically Sealed Diplex Filter unit designed for CATV applications.

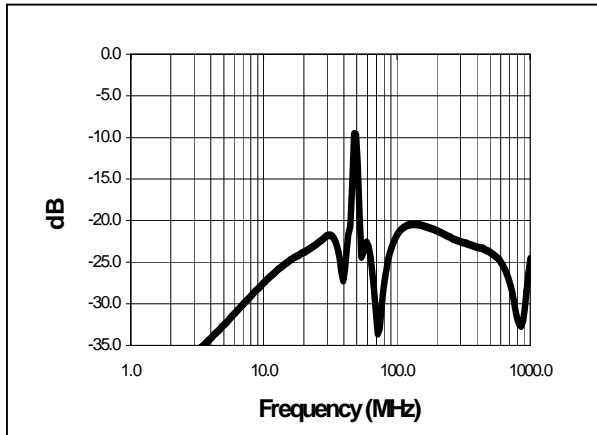
### Electrical Specifications @ - 40°C to + 85°C

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Frequency Range	5 – 1000 MHz	MHz			
Low Pass Cutoff	42 MHz	MHz	-	-	-
Low Pass Reject	54 MHz	MHz	-	-	-
High Pass Cutoff	54 MHz	MHz	-	-	-
Insertion Loss					
Pass Band	5 – 42 MHz	dB	-	0.5	1.2
Pass Band	54 – 1000 MHz	dB	-	0.5	1.1
Insertion Loss Flatness	5 – 42 MHz	dB	-	-	0.5
Isolation					
Stop Band	5 – 42 MHz	dB	45	50	-
Stop Band	54 – 1000 MHz	dB	45	50	-
Return Loss Input Port					
	5 – 42 MHz	dB	18	21	-
	54 – 870 MHz	dB	18	21	-
	870 – 1000 MHz	dB	15	17	-
Return Loss Low Pass Port					
	5 – 42 MHz	dB	18	21	-
Return Loss High Pass Port					
	54 – 870 MHz	dB	18	21	-
	870 – 1000 MHz	dB	15	17	-

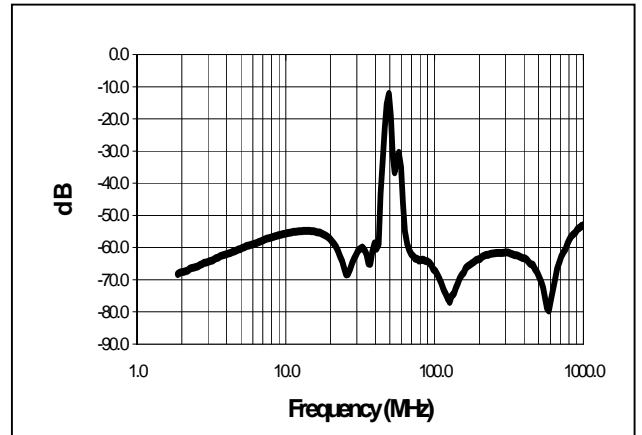
Note: Specifications subject to change without notice.

Typical Performance @ - 40° C to 85° C

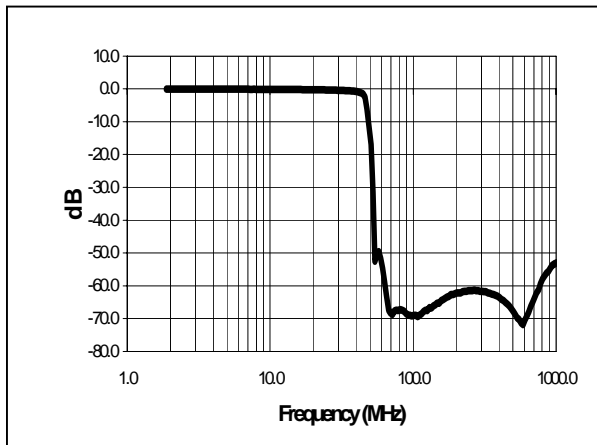
Input Return Loss



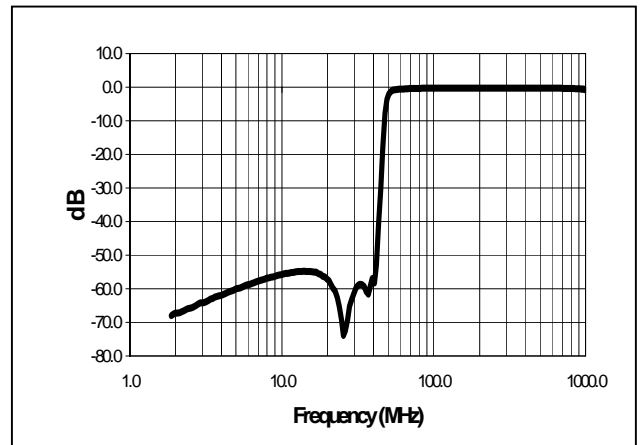
Isolation



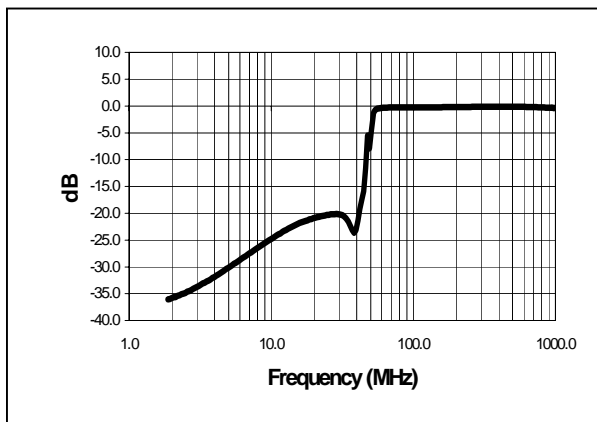
Low Pass Filter Insertion Loss



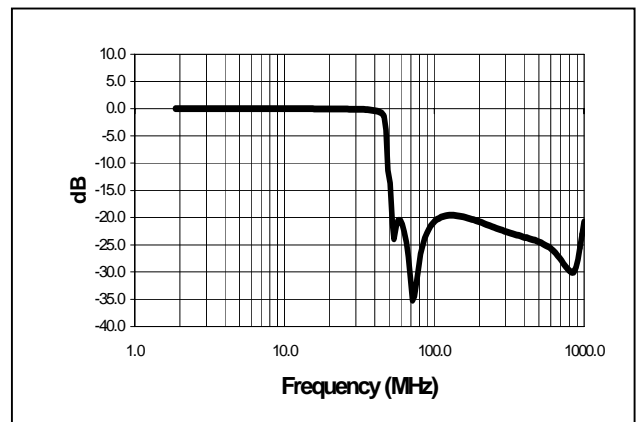
High Pass Filter Insertion Loss



Low Pass Filter Output Return Loss



High Pass Filter Output Return Loss



Rev A

Specifications subject to change without notice.

- North America: Tel. (800) 366-2266, Fax (800) 618-8883
- Asia/Pacific: Tel.+81-44-844-8296, Fax +81-44-844-8298
- Europe: Tel. +44 (1344) 869 595, Fax+44 (1344) 300 020



Visit [www.macom.com](http://www.macom.com) for additional data sheets and product information.

### Absolute Maximum Ratings

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

### Functional Configuration

Function	Pin No.
Input	18
Low Pass	9
High Pass	7
Ground	1-6, 8, 10-17, 19,20
Not Connected	-

Additional Specifications	Group Delay (nSec)
	38.5 - 42 MHz ≤ 20ns 54 - 57.5 MHz ≤ 20ns

Rev A

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