

Horizontal Plug-in Diplex Filter 5 - 85 / 102 - 1218 MHz

Rev. V2

Features

- Plug in Design
- Low Insertion Loss
- · Excellent Cross over Isolation
- Excellent Return loss
- RoHS compliant
- Lead Free

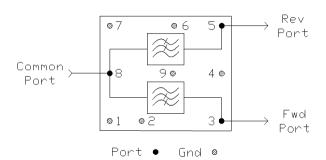
Description

MACOM's MAFL-011052 is a high performance horizontal plug-in diplex filter designed specifically for the CATV infrastructure market.

Ordering Information

Part Number	Package
MAFL-011052	200pcs per Box

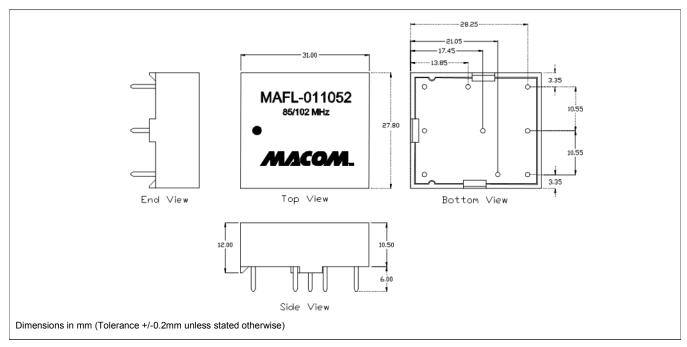
Functional Schematic



Pin Configuration

Pin No.	Function		
1,2,4,6,7,9	Ground		
3	Forward Path Port		
5	Reverse Path Port		
8	Common Port		

Outline Drawing



1



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

Parameter	Units	Min	Тур	Max
Insertion loss Reverse Path 5 - 85 MHz	dB	_	1.0	1.2
Forward Path 102 - 105 MHz 105 - 1218 MHz	dB dB	_ _	1.4 1.0	1.6 1.2
Isolation 5 - 85 MHz 85 - 105 MHz 105 - 1002 MHz 1002 - 1218 MHz	dB dB dB dB	48 38 45 40	51 41 51 45	1111
Return Loss Common Port 5 - 85 MHz 105 - 750 MHz 750 - 1218 MHz	dB dB dB	22 22 19	24 24 21	_ _ _
Group Delay Reverse Path 83.5 - 85.0 MHz 82.0 - 83.5 MHz	nSec nSec	_	8.0 6.0	_
Forward Path 109.275 - 112.855 MHz 115.275 - 118.855 MHz 121.2625 - 124.843 MHz	nSec nSec nSec	_ _ _	10.0 8.0 6.0	_ _ _

Recommended 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

Exceeding any one or combination of these limits may cause permanent damage to this device.

MACOM does not recommend sustained operation near these survivability limits.

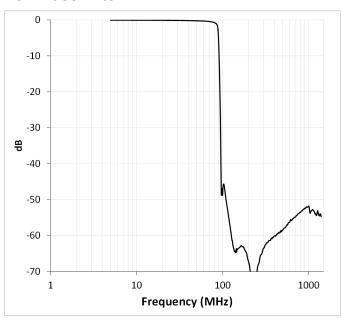


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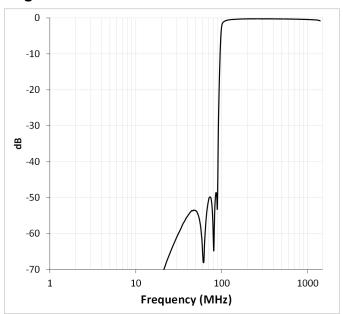
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Typical Performance Curves:

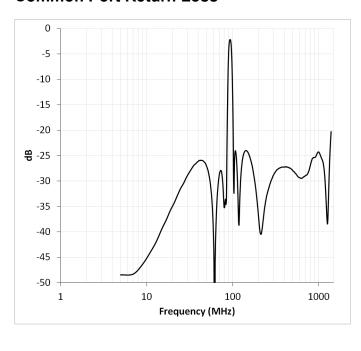
Low Pass Filter



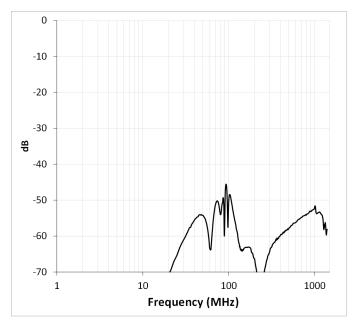
High Pass Filter



Common Port Return Loss



Isolation



MAFL-011052



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