

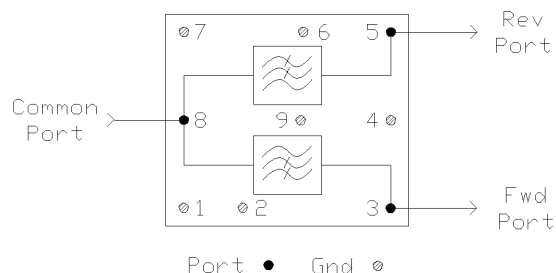
Features

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

Description

MAFL-011050 is a high performance horizontal plug-in diplex filter designed specifically for the CATV infrastructure market.

Functional Schematic



Ordering Information

Part Number	Package
MAFL-011050	200pcs per Box

Pin Configuration

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

Horizontal Plug-in Diplex Filter 5 - 65 / 86 - 1218 MHz

Rev. V1

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

Parameter	Units	Min	Typ	Max
Insertion loss				
Reverse Path				
5 - 65 MHz	dB	—	1.0	1.2
Forward Path				
86 - 1218 MHz	dB	—	1.0	1.2
Isolation				
5 - 65 MHz	dB	48	51	—
65 - 86 MHz	dB	38	41	—
86 - 1002 MHz	dB	45	51	—
1002 - 1218 MHz	dB	40	45	—
Return Loss				
Common Port				
5 - 65 MHz	dB	22	24	—
86 - 750 MHz	dB	22	24	—
750 - 1218 MHz	dB	19	21	—
Group Delay				
Reverse Path				
62 - 63.5 MHz	nSec	—	10	—
63.5 - 65 MHz	nSec	—	17	—
Forward Path				
112.25 - 116.68 MHz	nSec	—	17	—
120.25 - 124.68 MHz	nSec	—	10	—

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

1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. MACOM does not recommend sustained operation near these survivability limits.

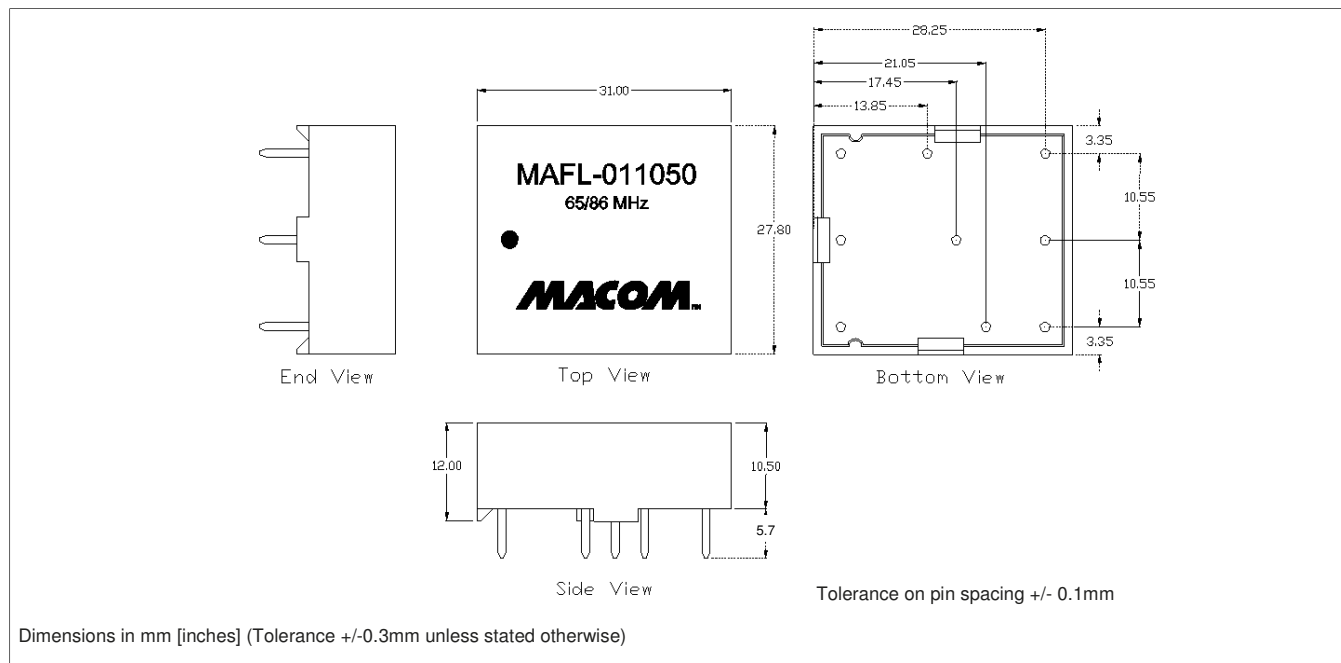
MAFL-011050



Horizontal Plug-in Diplex Filter
5 - 65 / 86 - 1218 MHz

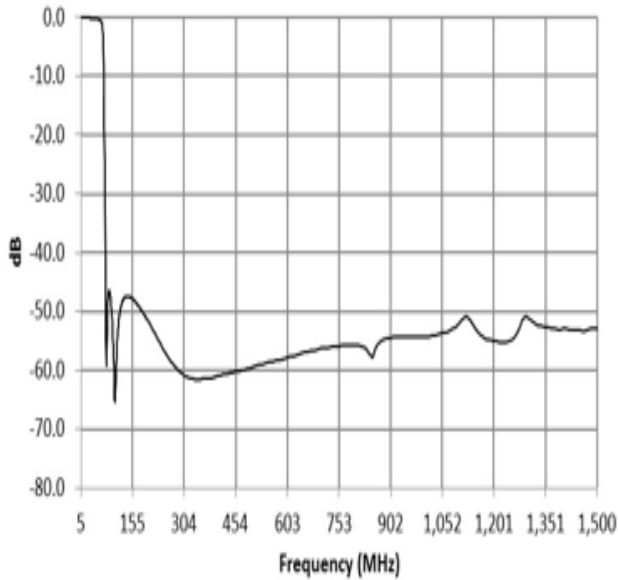
Rev. V1

Outline Drawing

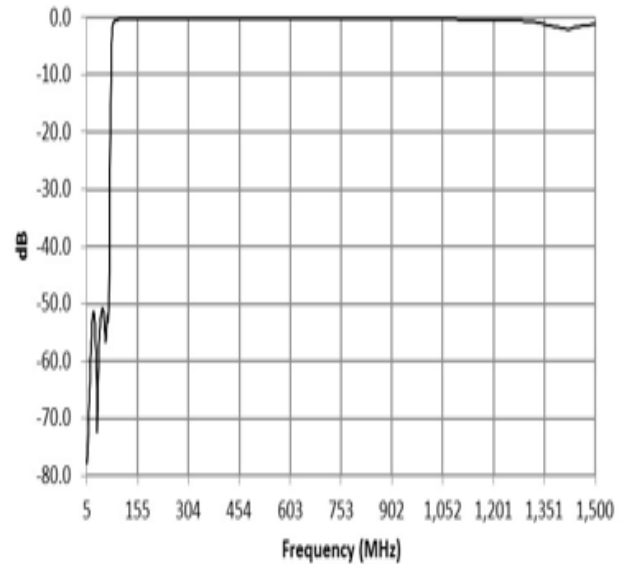


Typical Performance Curves:

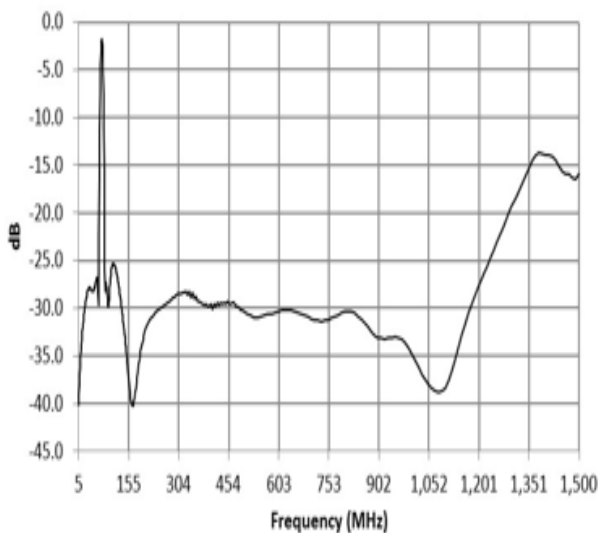
Low Pass Filter



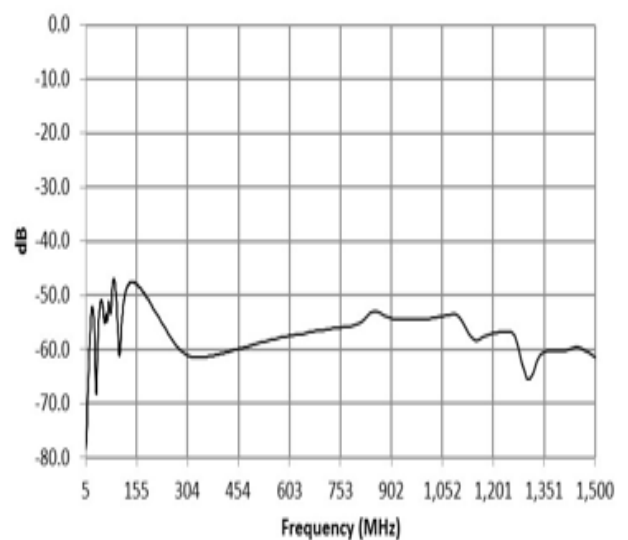
High Pass Filter



Common Port Return Loss



Isolation



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