

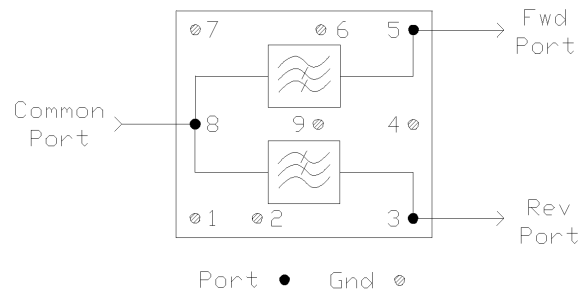
Features

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

Description

MAFL-011053 is a high performance horizontal plug-in diplex filter designed specifically for the CATV infrastructure market.

Functional Schematic



Ordering Information

Part Number	Package
MAFL-011053	200pcs per Box

Pin Configuration

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

Horizontal Plug-in Diplex Filter 5 - 204 / 258 - 1218 MHz

Rev. V1

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

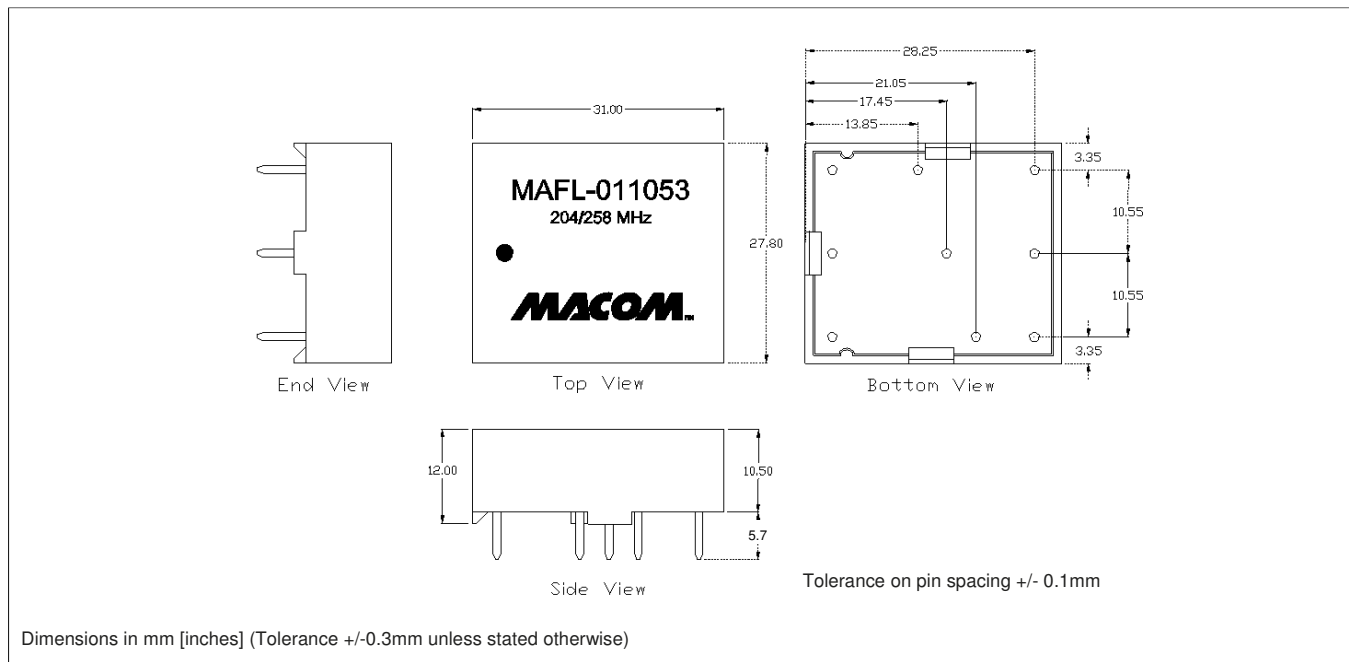
Parameter	Units	Min	Typ	Max
Insertion loss				
5-204 MHz	dB	—	1.0	1.2
258-1218 MHz	dB	—	1.0	1.2
Isolation				
5-204 MHz	dB	48	51	—
204-258 MHz	dB	38	41	—
258-600 MHz	dB	48	51	—
600-1002 MHz	dB	45	49	—
1002-1218 MHz	dB	40	45	—
Return loss Common Port				
5-204 MHz	dB	22	24	—
258-750 MHz	dB	22	24	—
750-1218 MHz	dB	19	21	—
Group Delay				
Forward Path				
259.2625 - 262.85 MHz	nSec	—	10.0	—
265.2625 - 268.85 MHz	nSec	—	8.0	—
271.2625 - 274.85 MHz	nSec	—	6.0	—
Reverse Path				
201.0 - 202.5 MHz	nSec	—	8.0	—
202.5 - 204.0 MHz	nSec	—	10.0	—

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

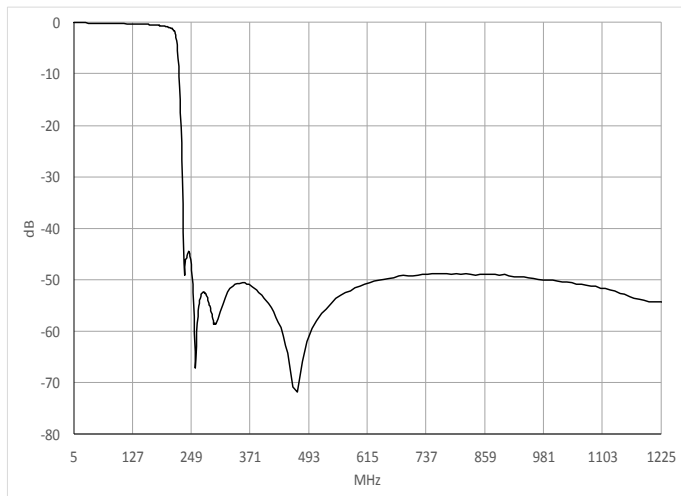
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. MACOM does not recommend sustained operation near these survivability limits.

Outline Drawing

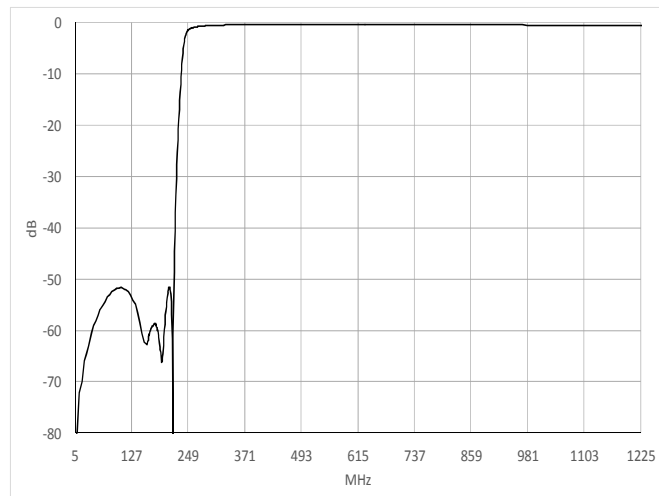


Typical Performance Curves:

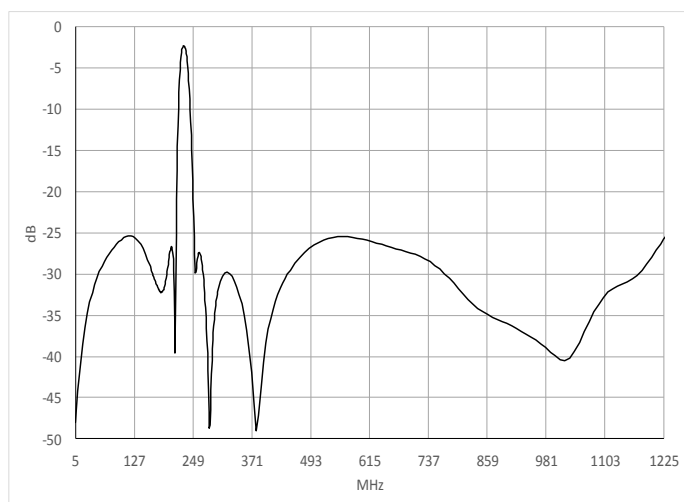
Low Pass Filter



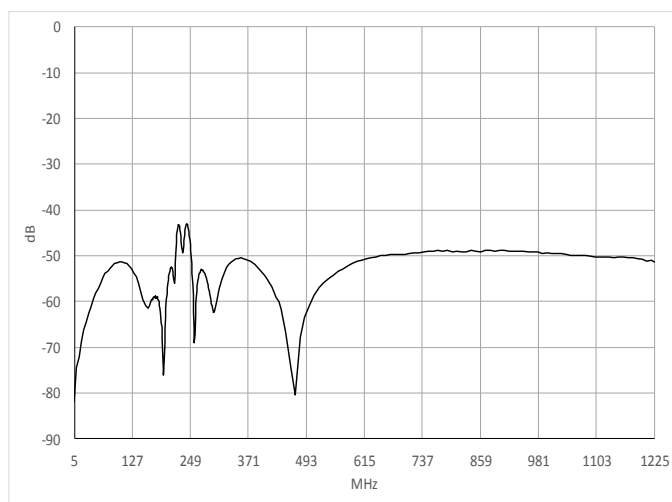
High Pass Filter



Common Port Return Loss



Isolation



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