

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

Rev. V2

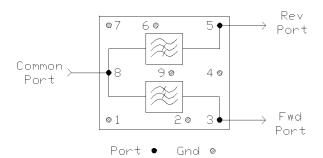
Features

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

Description

MACOM's MAFL-011054 is a high performance horizontal plug-in diplex filter designed specifically for the CATV infrastructure market.

Functional Schematic



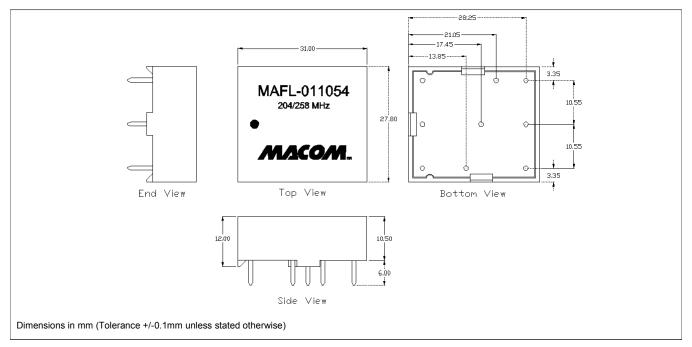
Ordering Information

Part Number	Package
MAFL-011054	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

Outline Drawing



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Target Electrical Specifications: T_A = 25°C, Z_0 = 75 Ω

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

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.

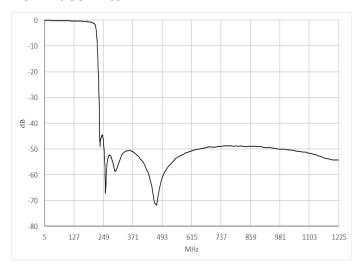


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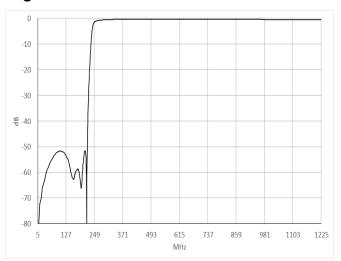
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Typical Performance Curves:

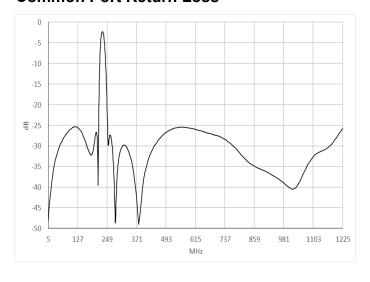
Low Pass Filter



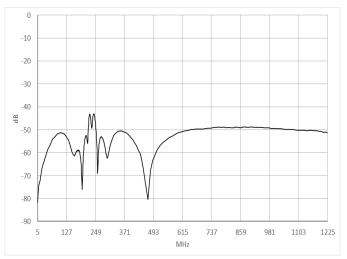
High Pass Filter



Common Port Return Loss



Isolation



MAFL-011054



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