MAFL-011055

CATV Diplex Filter
5-42 / 54-1218MHz

Rev. V2

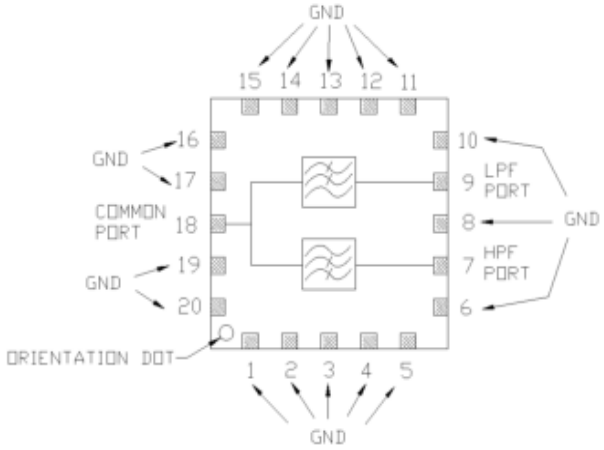
Features

- 75 Ohm
- SMT unit
- RoHS Compliant and Pb free.

Description

MAFL-011055 is a Low Cost, surface mount Diplex Filter unit designed for CATV applications, DTV and DBS applications.

Functional Schematic



Ordering Information

Part Number	Package
MAFL-011055	200

Pin Configuration

Function	Pin Number
Common Port	18
Low Pass Port	9
High Pass Port	7
Ground	1 - 6, 8, 10-17, 19, 20
Not connected	-

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Electrical Specifications: T_A = 25°C, Z_0 =

Parameter	Units	Min	Typ	Max
Insertion Loss				
5 - 42 MHz	dB	-	0.5	1.3
54 - 1218 MHz	dB		0.5	1.3
Insertion Loss Flatness				
5 - 42 MHz	dB	-	-	0.5
Filter Rejection				
5 - 42 MHz	dB	43	50	-
54 - 1218 MHz	dB	43	50	-
Filter Return Loss (all ports)				
5 - 42 MHz	dB	18	20	-
54 - 1218 MHz	dB	17	19	-
Group Delay				
38.5 - 42 MHz	nSec	-	-	20
54 - 57.5 MHz	nSec	-	-	20

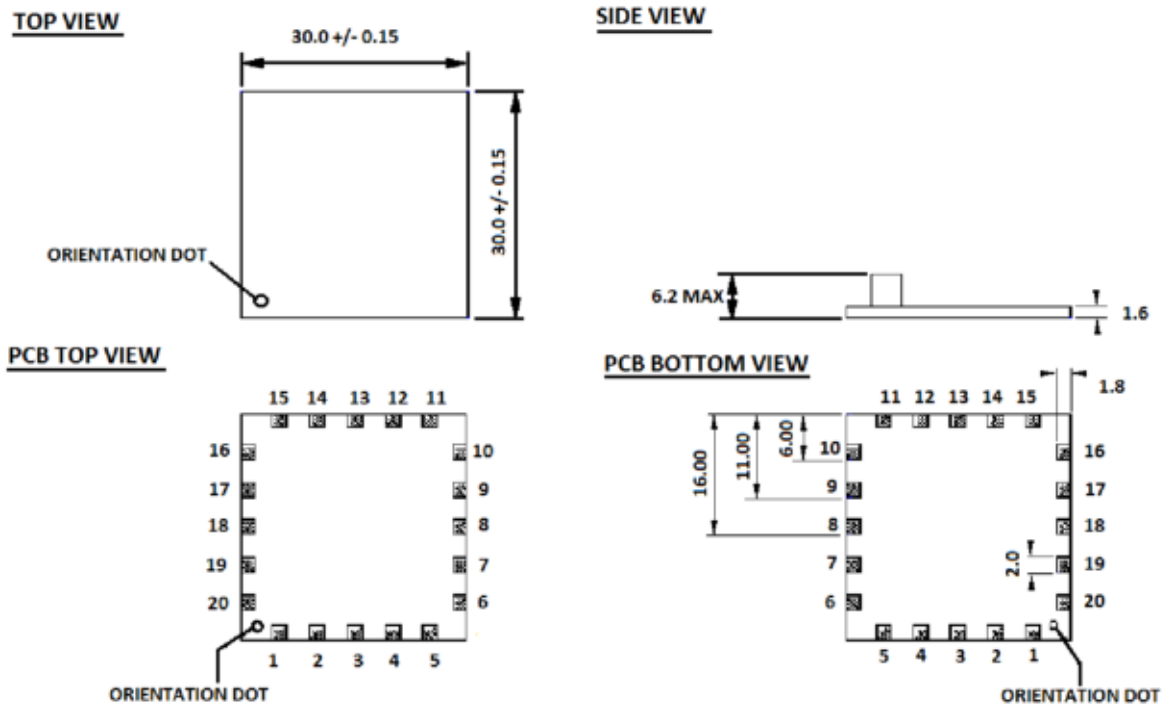
Recommended Maximum Ratings

Parameter	Value
Storage Temperature	-40ºC to +85ºC
Operating Temperature	-40ºC to +85ºC
DC Current	30mA
RF Power	250mW

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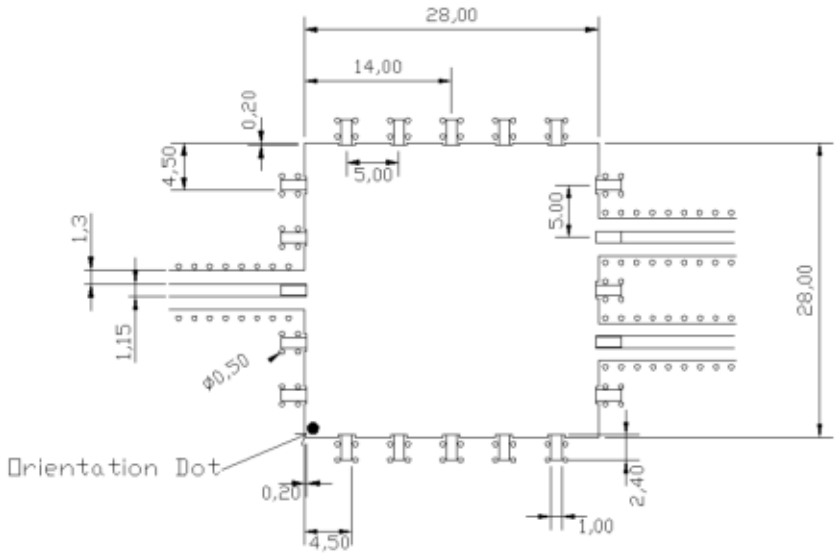
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Outline Drawing



Dimensions in mm. Tolerance: .x ± 0.1, .xx ± 0.05

Recommended PCB Configuration



Dimensions in mm. Tolerance: .x ± 0.1, .xx ± 0.05

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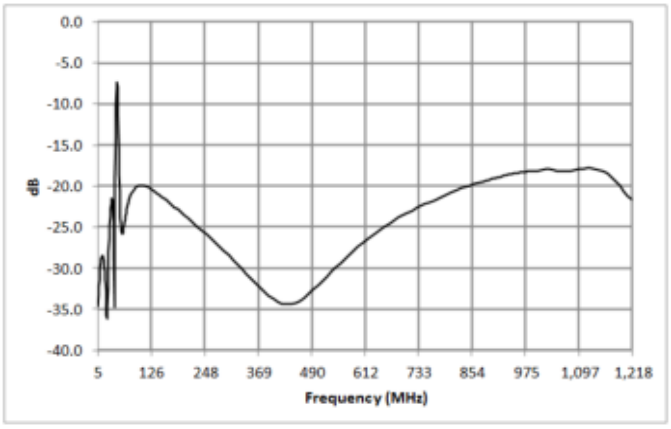
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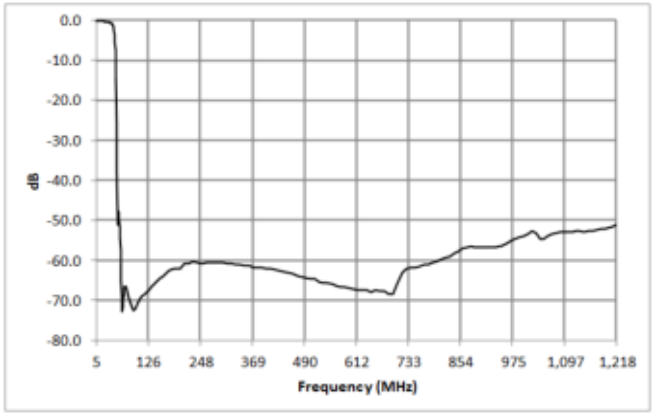
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Typical Performance: T_A = 25°C, Z_0 = 75Ω

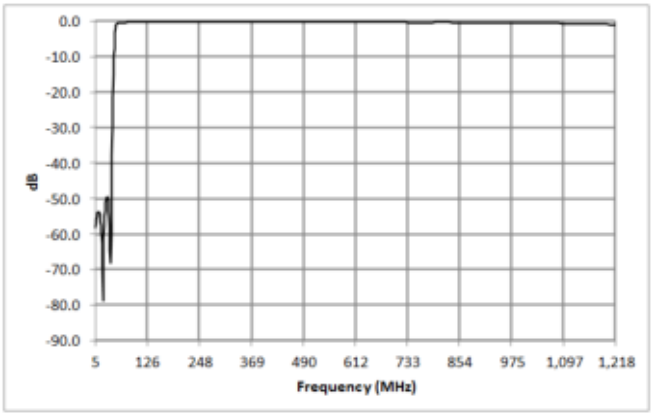
Input Port Return Loss



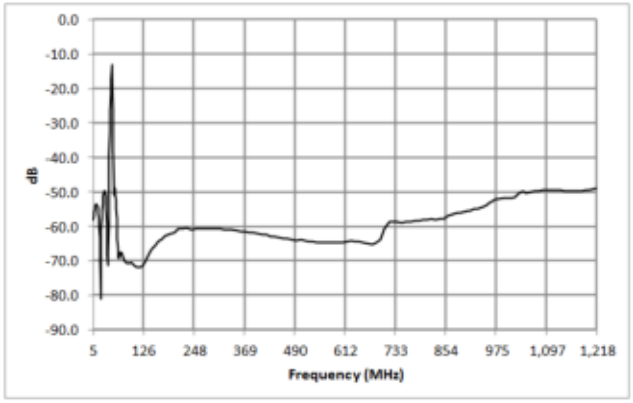
Low Pass Filter Insertion Loss



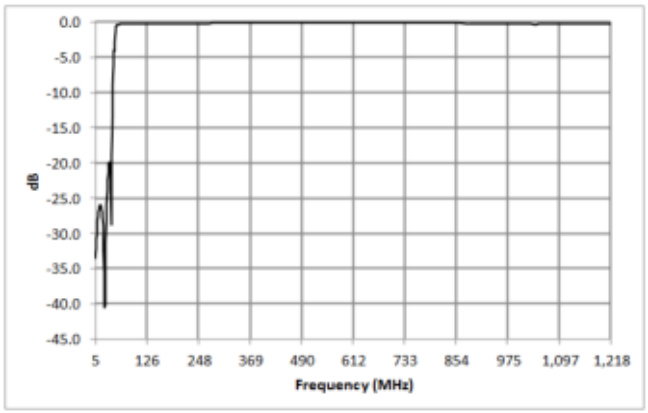
High Pass Filter Insertion Loss



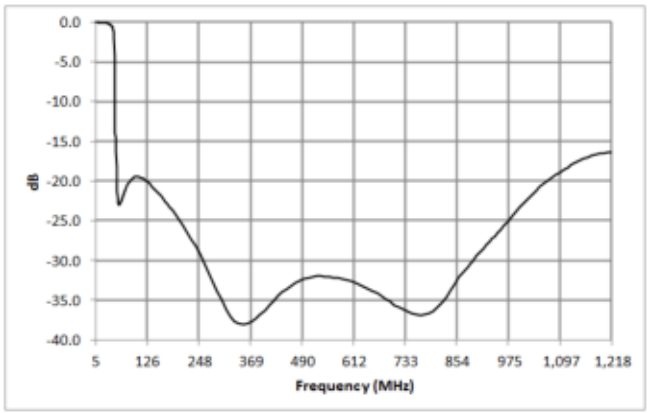
Filter Isolation



Low Pass port Return Loss



High Pass port Return Loss

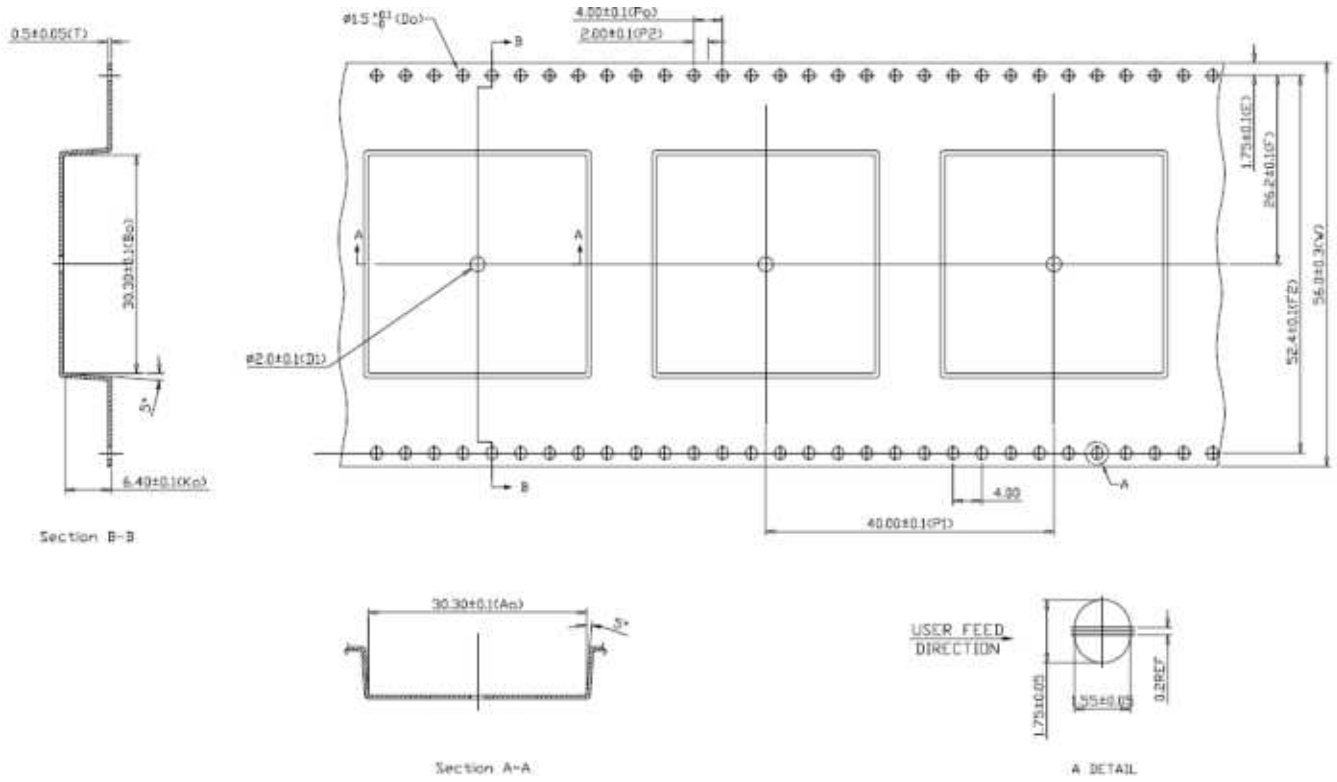


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Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	200
Reel Size	mm	330
Tape Width	mm	56.00
Pitch	mm	40.00
Ao	mm	30.3
Bo	mm	30.3
Ko	mm	6.4
Orientation	-	F30
Reference Application Note ANI-019 for orientation		



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