

CATV Diplex Filter 5-42 / 54-1218MHz

Rev. V2

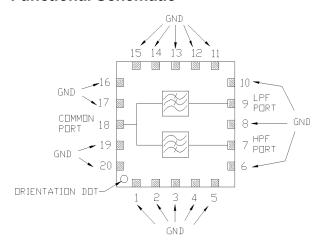
Features

- 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	Тур	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

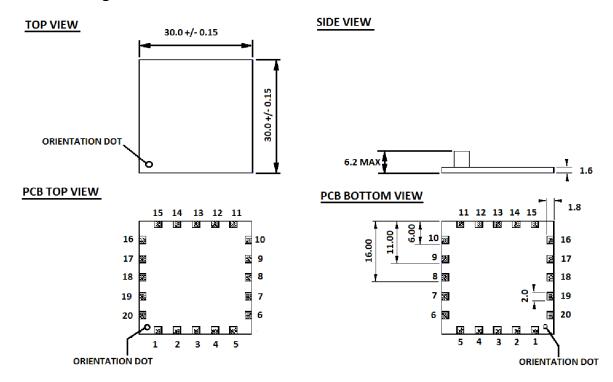
Parameter	Value		
Storage Temperature	-40°C to +85°C		
Operating Temperature	-40°C to +85°C		
DC Current	30mA		
RF Power	250mW		



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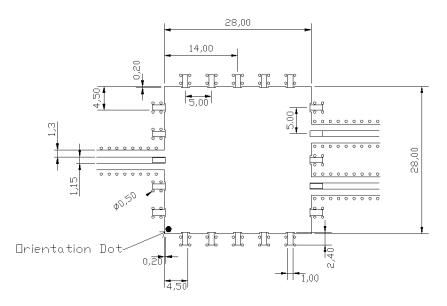
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Outline Drawing



Dimensions in mm. Tolerance: $.x \pm 0.1$, $.xx \pm 0.05$

Recommended PCB Configuration



Dimensions in mm. Tolerance: $.x \pm 0.1$, $.xx \pm 0.05$

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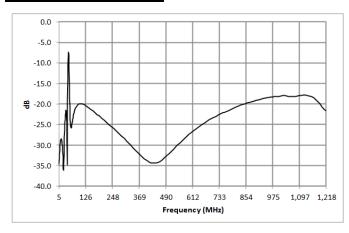


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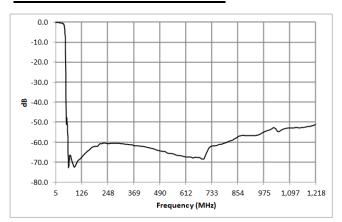
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Typical Performance: $T_A = 25^{\circ}C$, $Z_0 = 75\Omega$

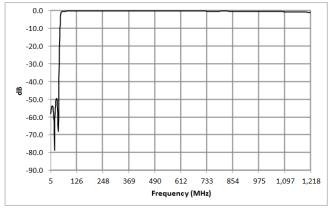
Input Port Return Loss



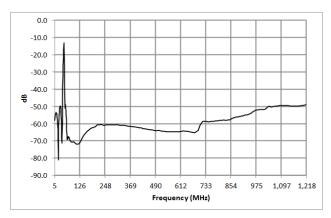
Low Pass Filter Insertion Loss



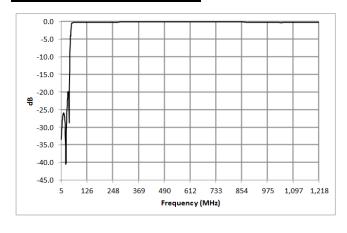
High Pass Filter Insertion Loss



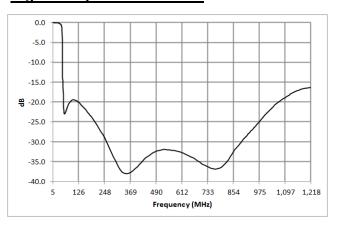
Filter Isolation



Low Pass port Return Loss



High Pass port Return Loss



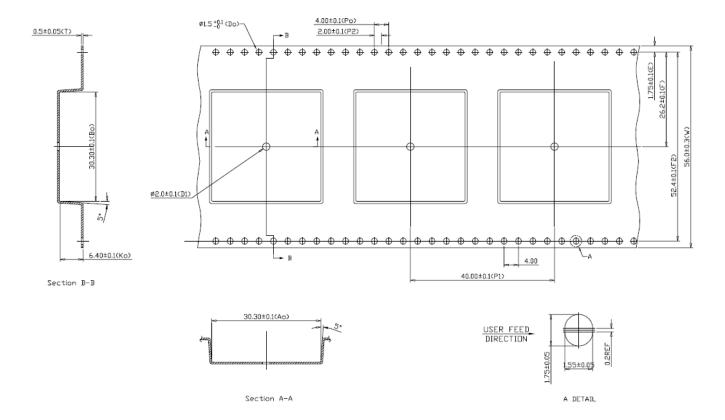


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Tape & Reel Information

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



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