

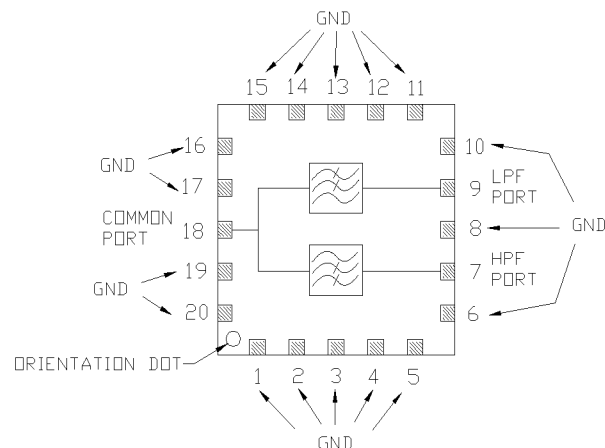
Features

- 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	-

CATV Diplex Filter
5-42 / 54-1218MHz

Rev. V2

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

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

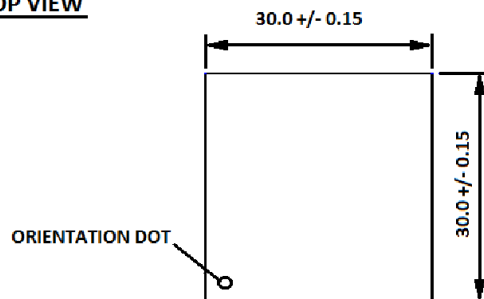
Parameter	Value
Storage Temperature	-40°C to +85°C
Operating Temperature	-40°C to +85°C
DC Current	30mA
RF Power	250mW

CATV Diplex Filter 5-42 / 54-1218MHz

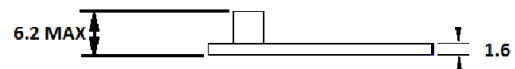
Rev. V2

Outline Drawing

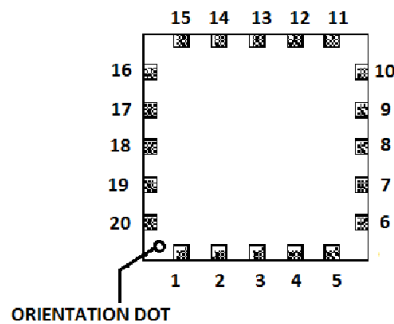
TOP VIEW



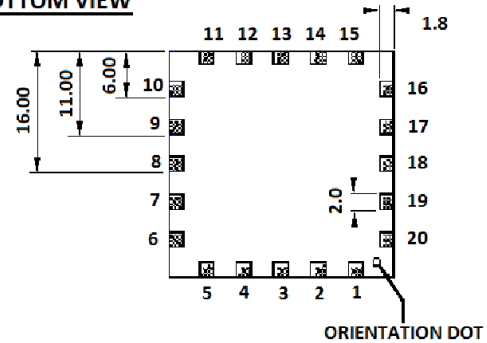
SIDE VIEW



PCB TOP VIEW

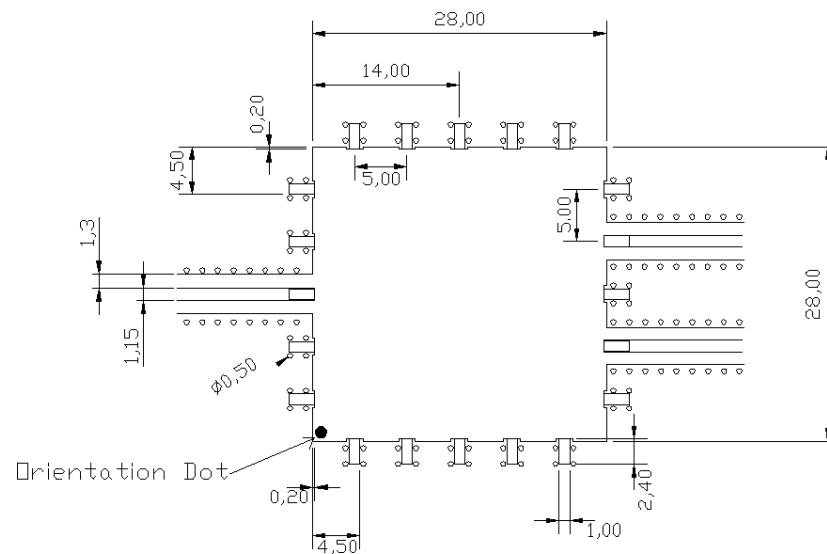


PCB BOTTOM VIEW



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

Recommended PCB Configuration



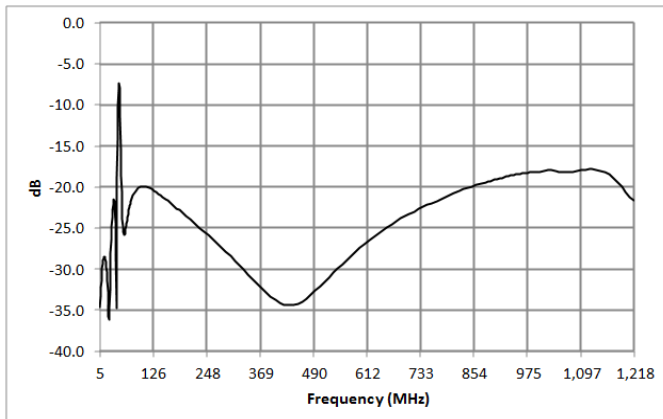
Dimensions in mm. Tolerance: .x ± 0.1, .xx ± 0.05

CATV Duplex Filter 5-42 / 54-1218MHz

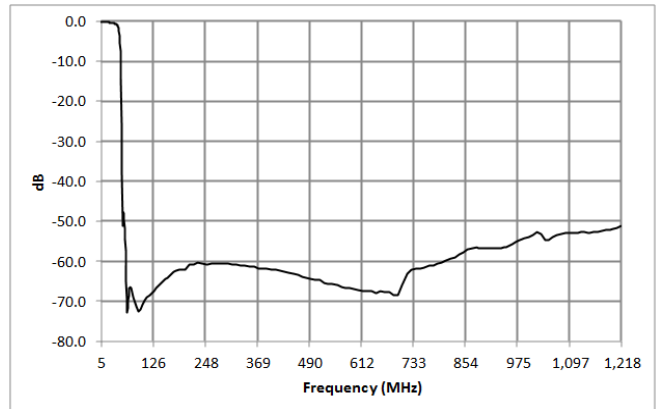
Rev. V2

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

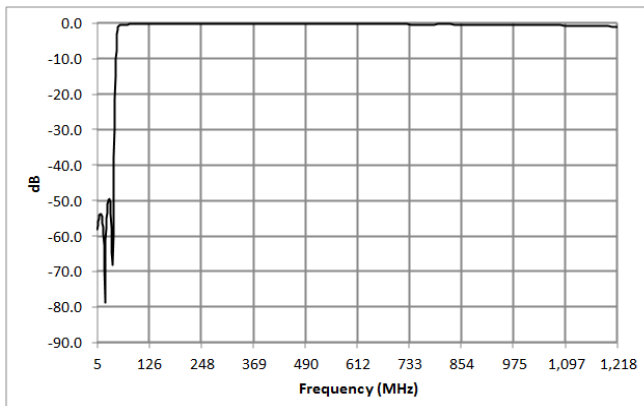
Input Port Return Loss



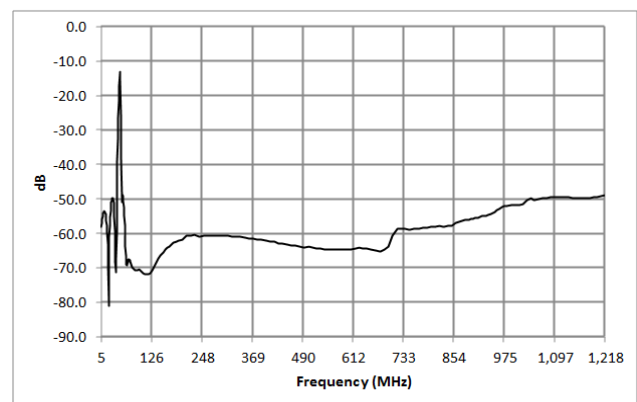
Low Pass Filter Insertion Loss



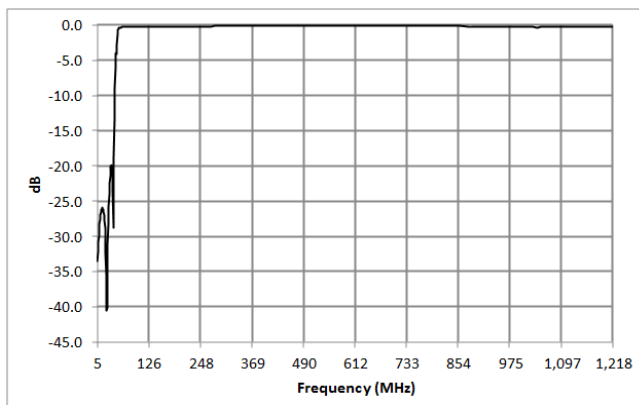
High Pass Filter Insertion Loss



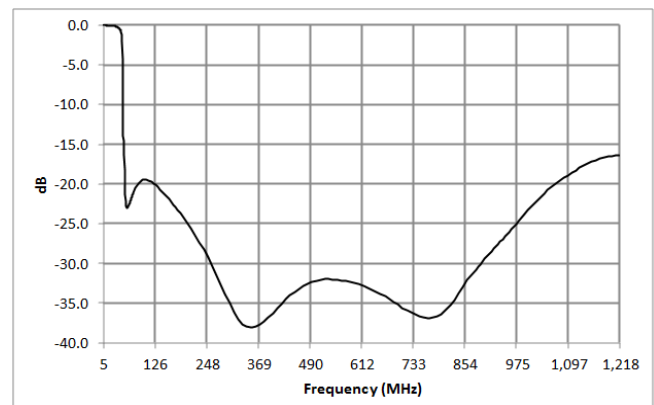
Filter Isolation



Low Pass port Return Loss



High Pass port Return Loss



Rev. V2

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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