

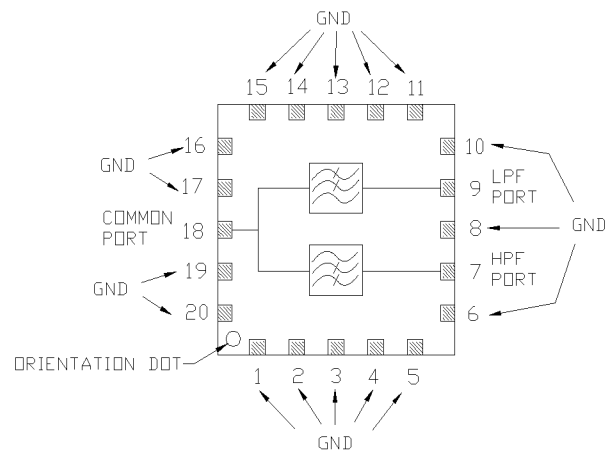
Features

- 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	-

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

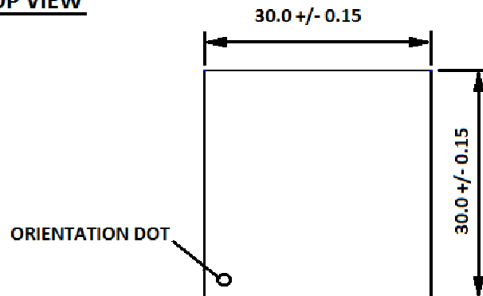
Parameter	Units	Min	Typ	Max
Insertion Loss 5 - 42 MHz	dB	-	0.5	1.3
	54 - 1218 MHz	dB	0.5	1.3
Insertion Loss Flatness 5 - 42 MHz	dB	-	-	0.5
Filter Rejection 5 - 42 MHz	dB	43	50	-
	54 - 1218 MHz	dB	43	50
Filter Return Loss (all ports) 5 - 42 MHz	dB	18	20	-
	54 - 1218 MHz	dB	17	19
Group Delay 38.5 - 42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

Recommended Maximum Ratings

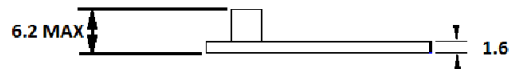
Parameter	Value
Storage Temperature	-40°C to +85°C
Operating Temperature	-40°C to +85°C
DC Current	30mA
RF Power	250mW

Outline Drawing

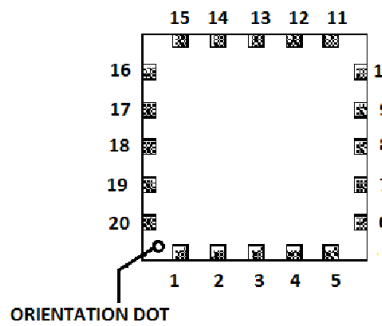
TOP VIEW



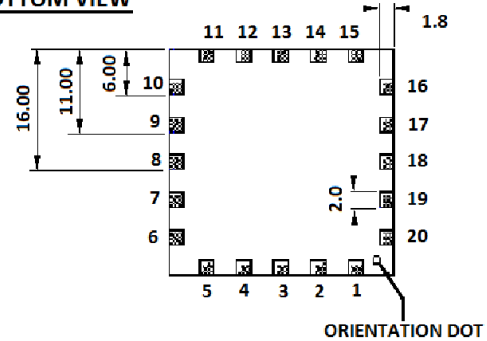
SIDE VIEW



PCB TOP VIEW

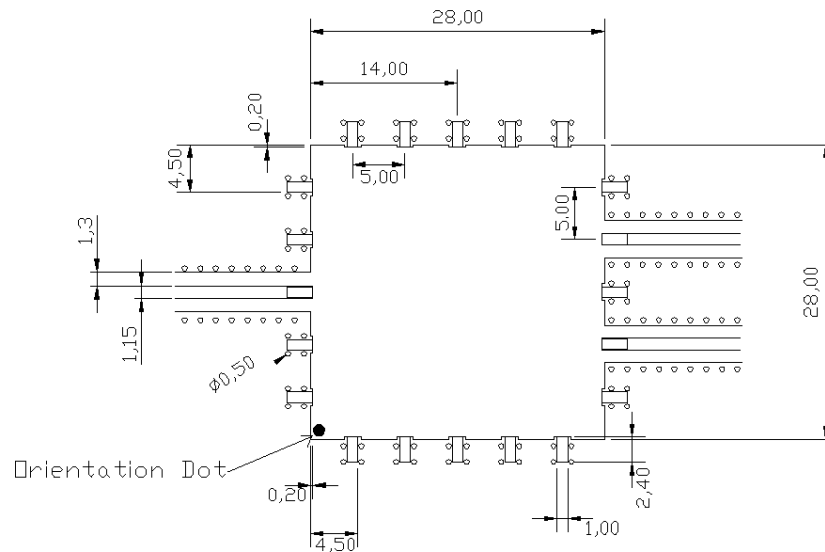


PCB BOTTOM VIEW



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

Recommended PCB Configuration



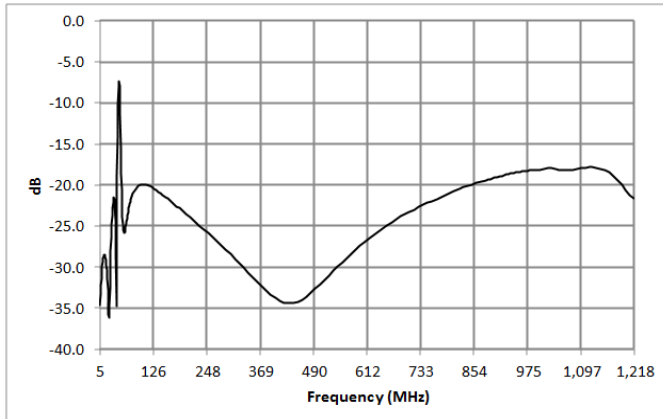
Dimensions in mm. Tolerance: .x ± 0.1, .xx ± 0.05

CATV Diplex Filter 5-42 / 54-1218MHz

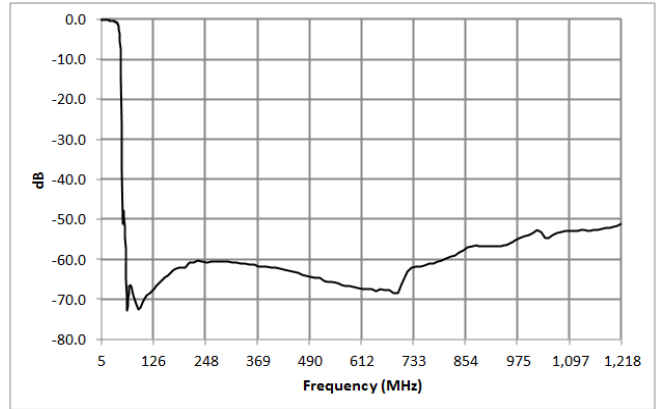
Rev. V2

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

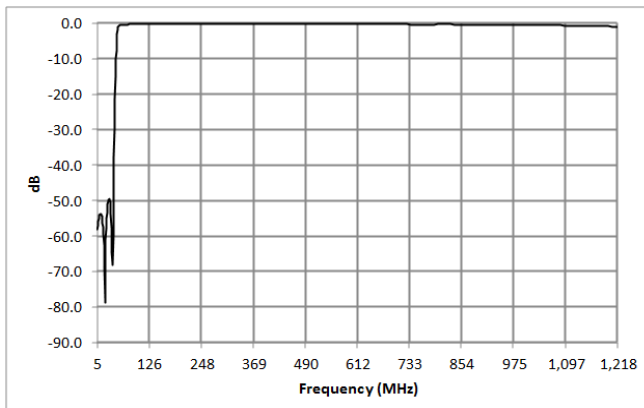
Input Port Return Loss



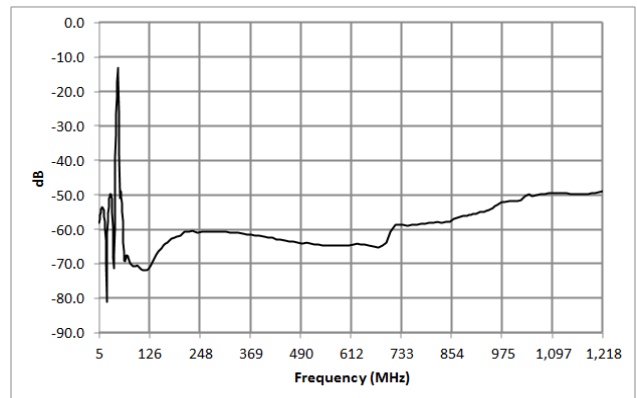
Low Pass Filter Insertion Loss



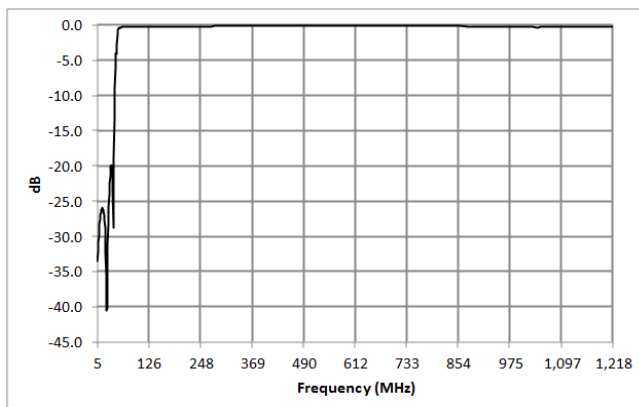
High Pass Filter Insertion Loss



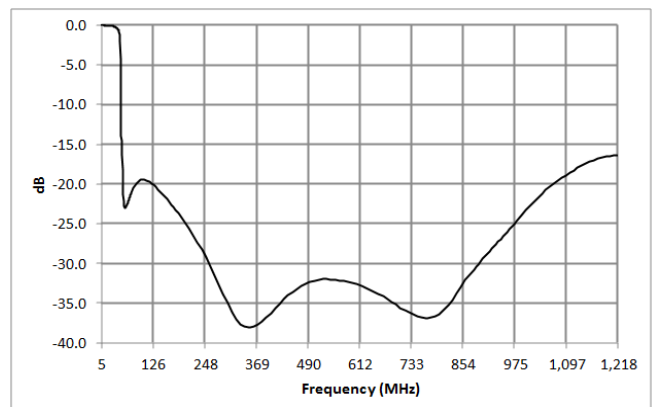
Filter Isolation



Low Pass port Return Loss

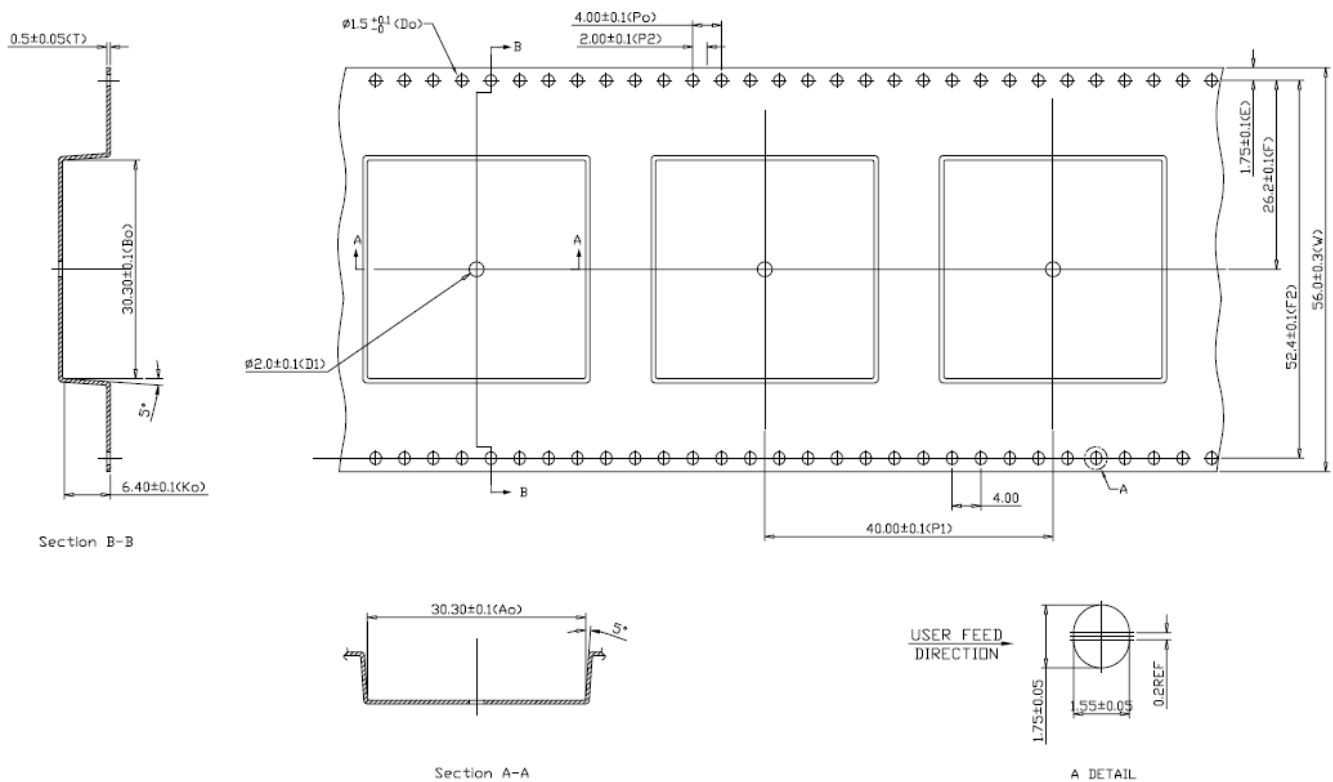


High Pass port Return Loss



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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