

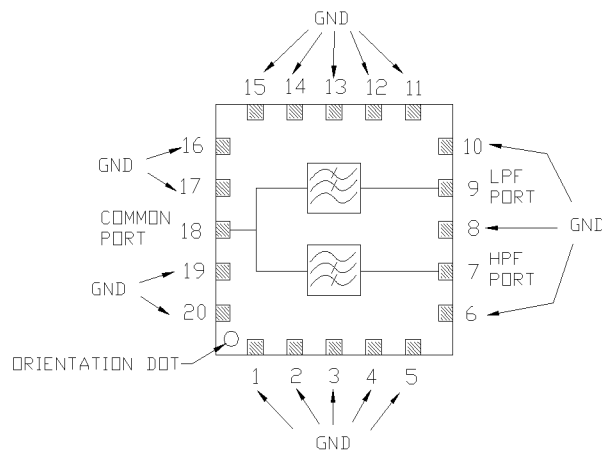
Features

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

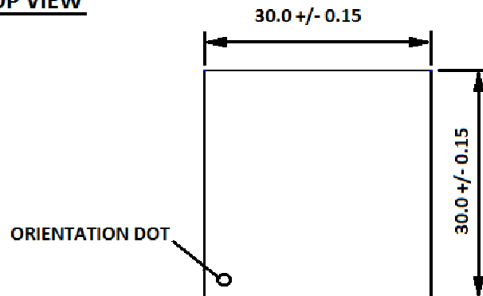
| Parameter | Units | Min | Typ | Max |
|---|---------------|------|-----|-----|
| Insertion Loss 5 - 42 MHz | dB | - | 0.5 | 1.3 |
| | 54 - 1218 MHz | dB | 0.5 | 1.3 |
| Insertion Loss Flatness 5 - 42 MHz | dB | - | - | 0.5 |
| Filter Rejection 5 - 42 MHz | dB | 43 | 50 | - |
| | 54 - 1218 MHz | dB | 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

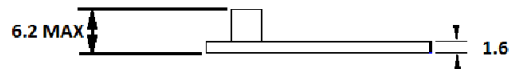
| Parameter | Value |
|-----------------------|----------------|
| Storage Temperature | -40°C to +85°C |
| Operating Temperature | -40°C to +85°C |
| DC Current | 30mA |
| RF Power | 250mW |

Outline Drawing

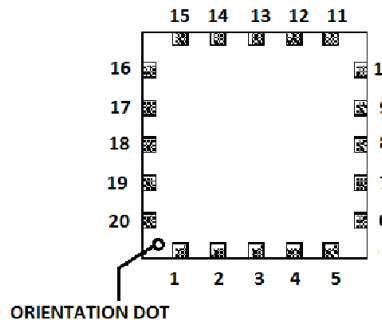
TOP VIEW



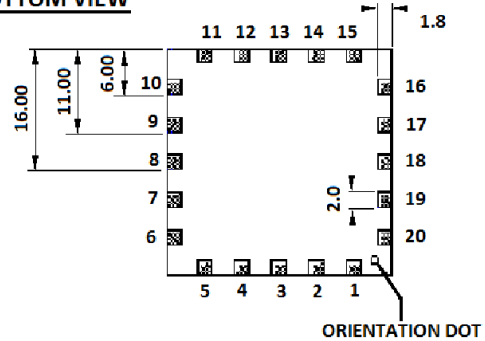
SIDE VIEW



PCB TOP VIEW

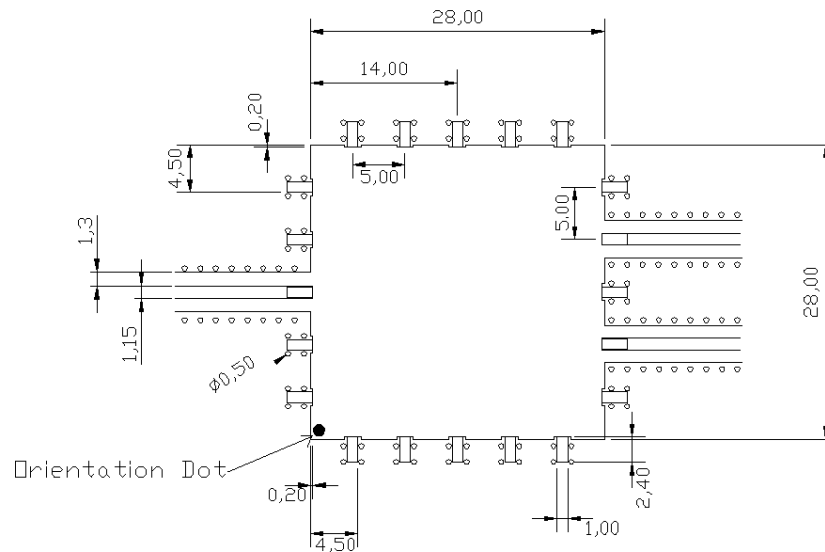


PCB BOTTOM VIEW



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

Recommended PCB Configuration



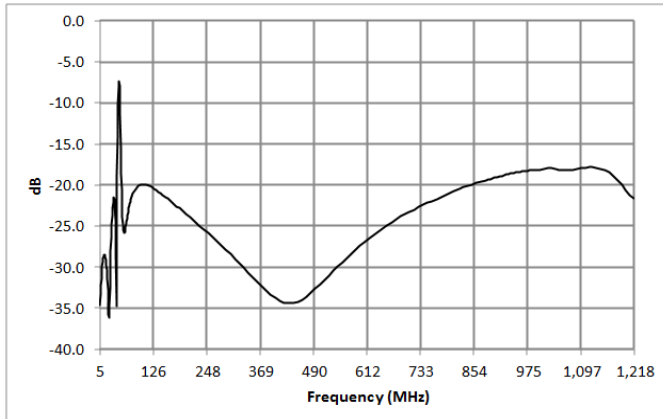
Dimensions in mm. Tolerance: .x ± 0.1, .xx ± 0.05

CATV Diplex Filter 5-42 / 54-1218MHz

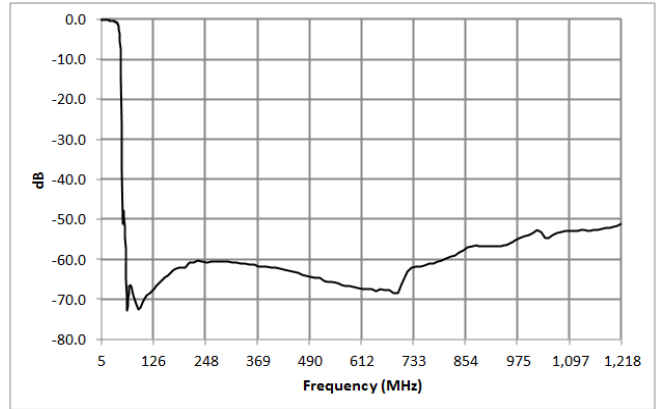
Rev. V2

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

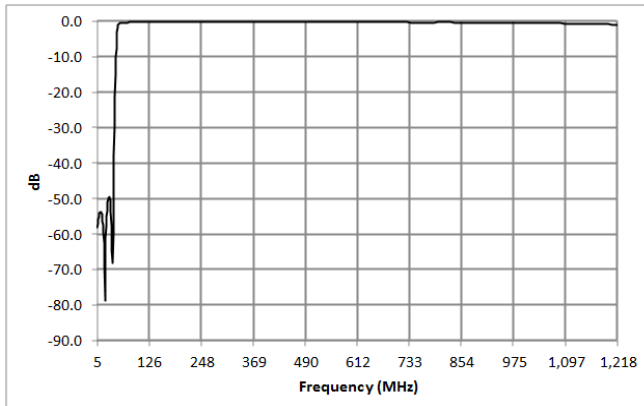
Input Port Return Loss



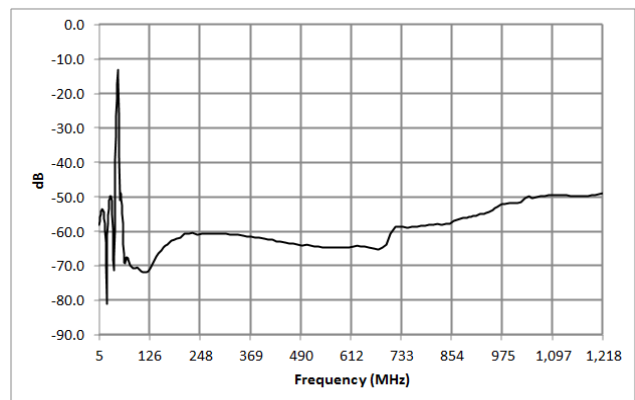
Low Pass Filter Insertion Loss



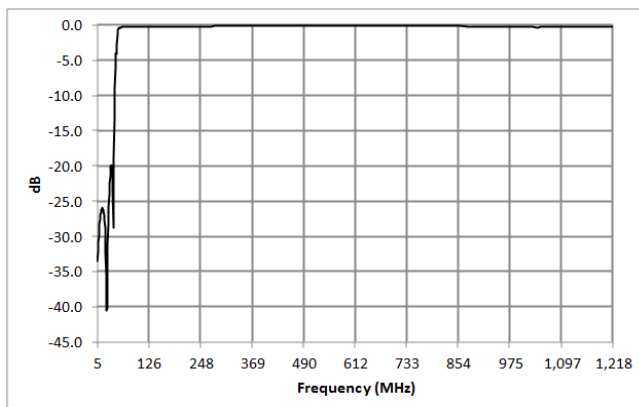
High Pass Filter Insertion Loss



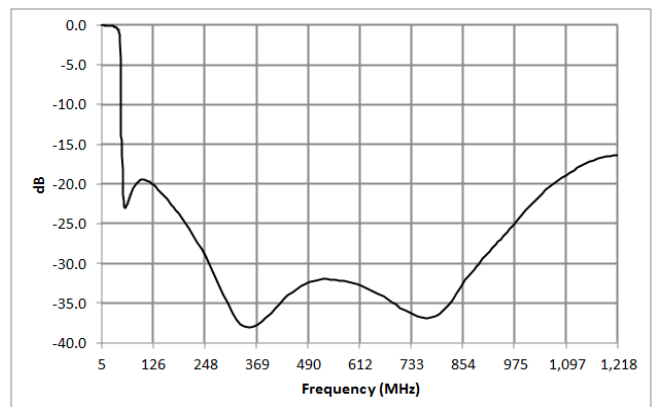
Filter Isolation



Low Pass port Return Loss

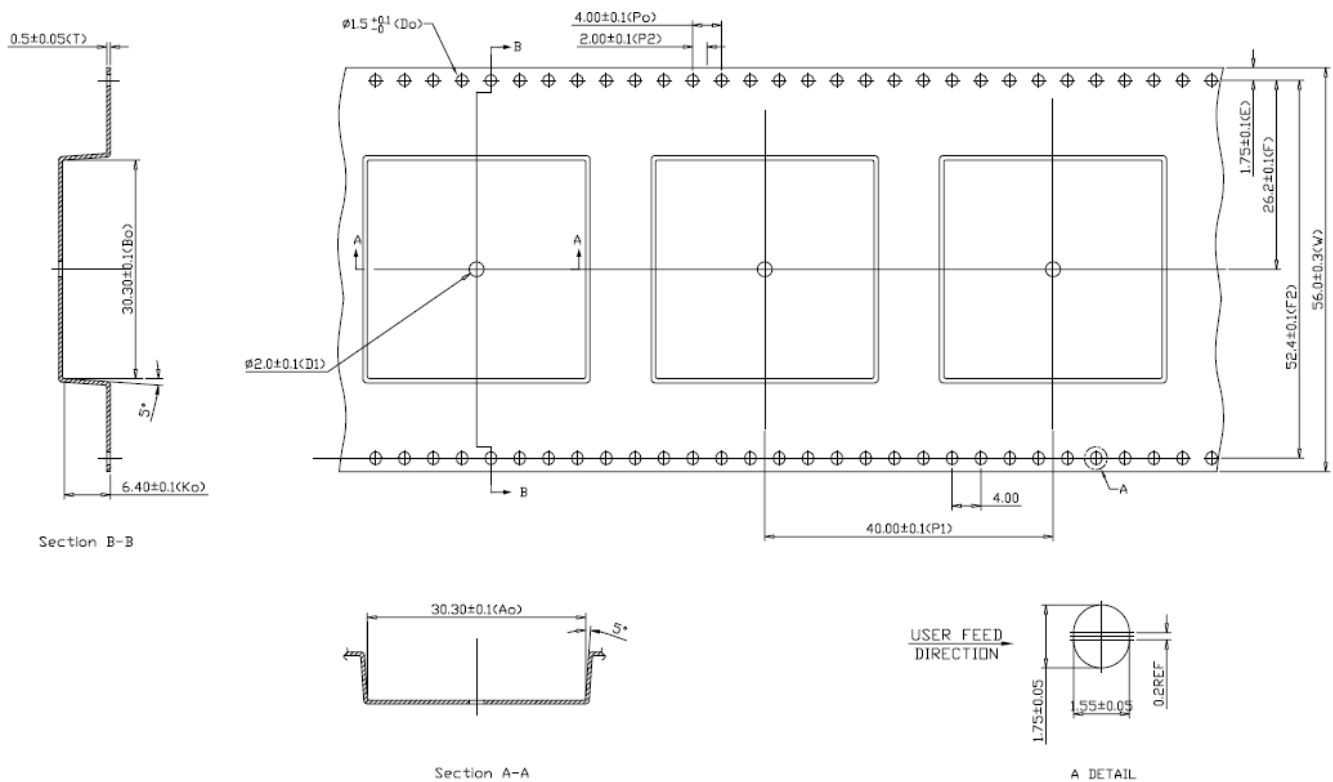


High Pass port Return Loss



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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