

Rev. V2

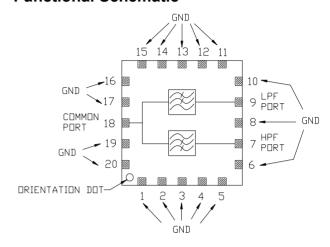
Features

- 75 Ohm
- SMT unit
- RoHS Compliant

Description

The MAFL-011014 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-011014 | 200 piece reel |

Pin Configuration

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

Electrical Specifications: $T_A = 25^{\circ}C$, $Z_0 = 75 \Omega$

| Parameter | Units | Min. | Тур. | Max. |
|---|-------|----------|----------|------------|
| Insertion Loss 5 - 65 MHz 88 - 1002 MHz | dB | _ | 0.5 | 1.2 1.2 |
| Filter Rejection 5 - 65 MHz 88 - 1002 MHz | dB | 50 50 | 55 55 | _ |
| Filter Return Loss 5 - 65 MHz 88 - 1002 MHz | dB | 15 12 | 20 20 | _ |
| Filter Isolation 5 - 65 MHz 88 - 1002 MHz | dB | 50 50 | 55 50 | _ |

Recommended Maximum Ratings

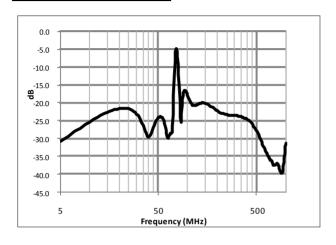
| Parameter | Value | |
|-----------------------|----------------|--|
| Storage Temperature | -40°C to +85°C | |
| Operating Temperature | -40°C to +85°C | |
| DC Current | 30mA | |
| RF Power | 250mW | |



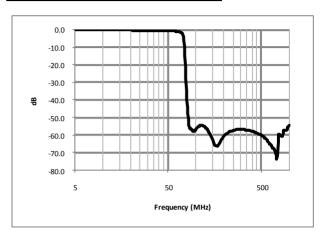
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Typical Performance: $T_A = 25^{\circ}C$, $Z_0 = 75\Omega$

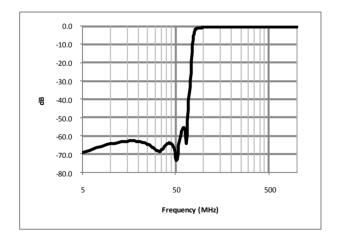
Input Port Return Loss



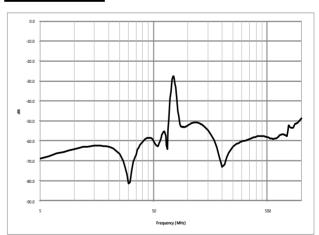
High Pass Filter Insertion Loss



Low Pass Filter Insertion Loss



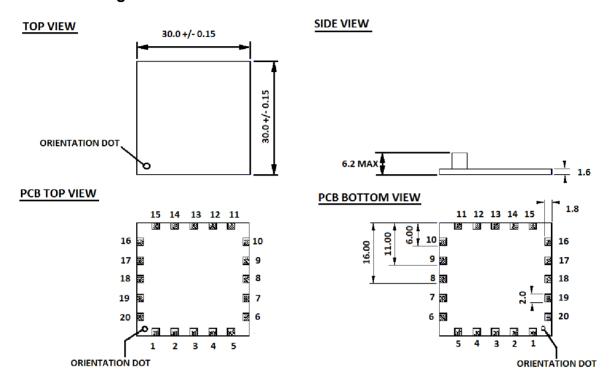
Filter Isolation





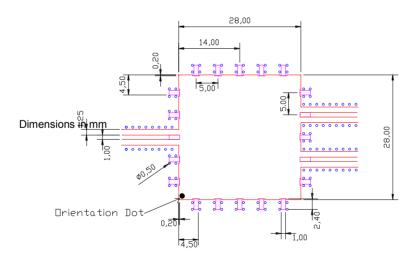
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Outline Drawing



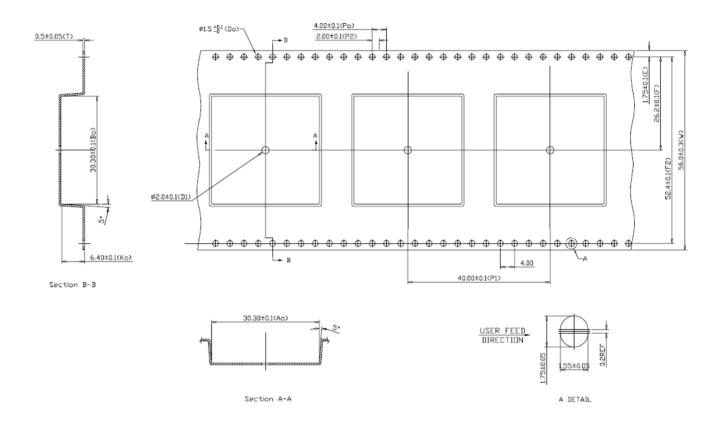
Dimensions in mm

Recommended PCB Configuration





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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 | | | |

MAFL-011014



CATV Diplex Filter 5-65 / 88-1002MHz

Rev. V2

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