

MAFL-010608



MoCA/SAT Diplex Filter 650 - 875 / 950 - 3000 MHz

Rev. V2

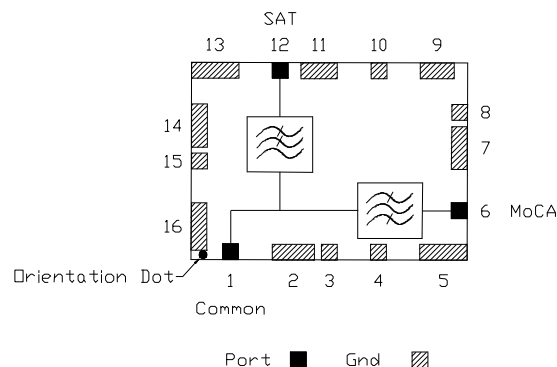
Description

- M/A-COM Technology Solutions MAFL-010608 is a surface mount diplex filter unit designed for MoCA & Satellite applications.

Features

- 75 Ohm
- SMT unit
- RoHS* Compliant
- MoCA BPF 650-875 MHz
- SAT HPF 950-3000 MHz

Functional Schematic



Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	300
Reel Size	mm	330
Tape Width	mm	56.00
Pitch	mm	32.00
Ao	mm	25.30
Bo	mm	35.45
Ko	mm	3.80
Orientation	-	F30
Reference Application Note ANI-019 for orientation		

Pin Configuration

Function	Pin Number
Common Port	1
MoCA Port	6
SAT Port	12
Ground	2-5, 7-11, 13-16
Not connected	-

Ordering Information

Part Number	Package
MAFL-010608	Tape & Reel

1 * Restrictions on Hazardous Substances, European Union Directive 2002/95/EC

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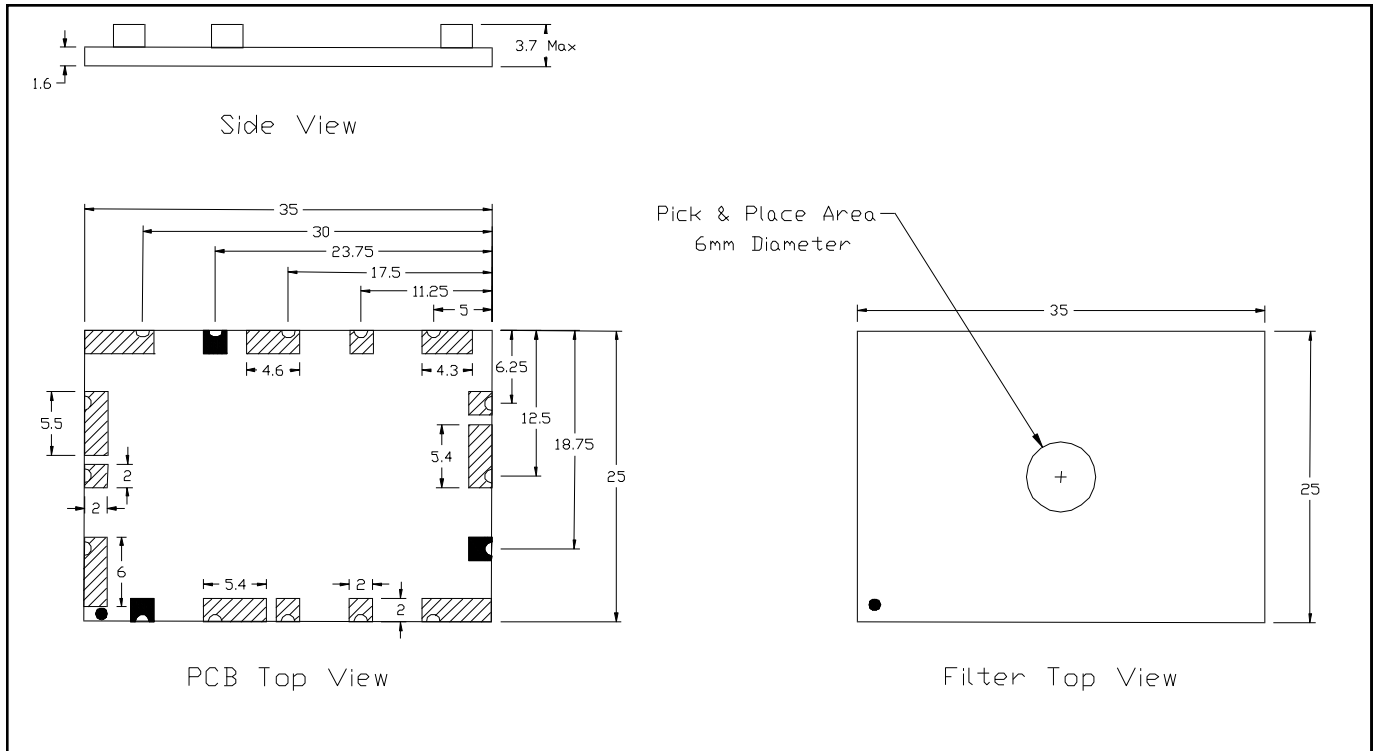
Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$

Parameter	Units	Min	Typ	Max
MoCA Band				
Insertion Loss				
650 - 875 MHz	dB	-	2.5	3.0
Rejection				
500 - 565 MHz	dB	35	40	-
565 - 575 MHz	dB	30	33	-
950 - 960 MHz	dB	32	33	-
960 - 3000 MHz	dB	37	39	-
SAT Band				
Insertion Loss				
950 - 1000 MHz	dB	-	2.75	3.0
1000 - 3000 MHz	dB	-	1.8	3.0
Rejection				
500 - 855 MHz	dB	37	39	-
855 - 865 MHz	dB	33	35	-
865 - 875 MHz	dB	29	31	-
Port to Port Isolation				
MoCA Port into SAT Port				
500 - 855 MHz	dB	37	39	-
855 - 865 MHz	dB	33	35	-
865 - 875 MHz	dB	29	31	-
875 - 950 MHz	dB	10	12	-
950 - 960 MHz	dB	32	33	-
960 - 3000 MHz	dB	37	39	-
SAT Port into MoCA Port				
950 - 960 MHz	dB	32	33	-
960 - 3000 MHz	dB	37	39	-
Return Loss				
Common Port				
650 - 875 MHz	dB	10	10.5	-
950 - 3000 MHz	dB	10	10.25	-
MoCA Port				
650 - 875 MHz	dB	9.5	10.5	-
SAT Port				
950 - 3000 MHz	dB	10	10.25	-

Recommended Maximum Ratings

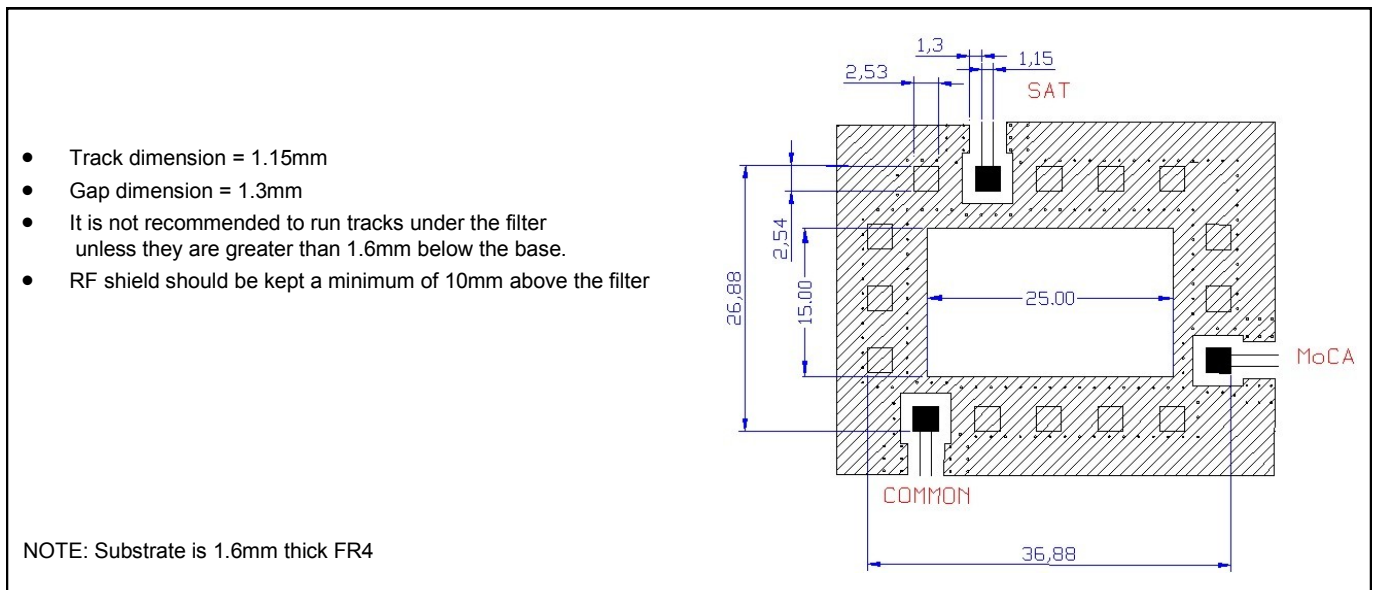
Parameter	Value
Storage Temperature	-40°C to +85°C
Operating Temperature	-40°C to +85°C

Outline Drawing:



Dimensions in mm. Tolerance: .x ± 0.1 unless otherwise noted

Recommended PCB Configuration



NOTE: Substrate is 1.6mm thick FR4

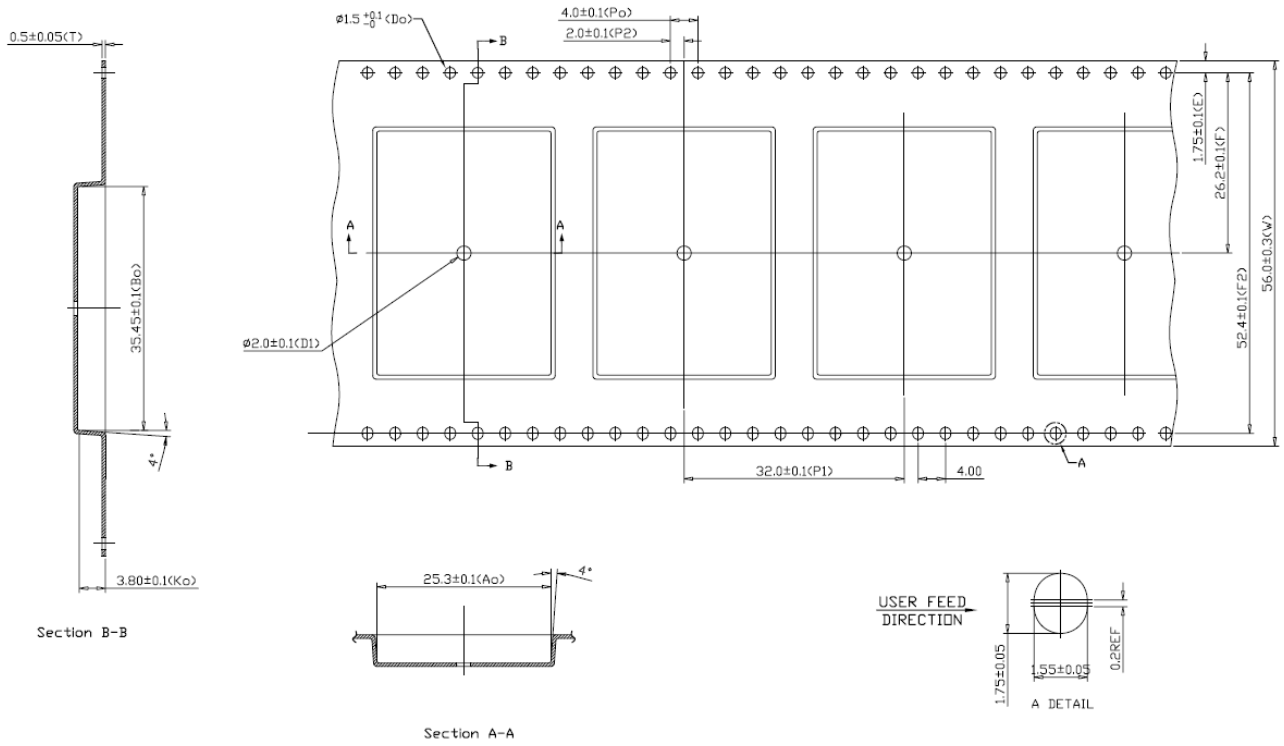
3 Dimensions in mm. Tolerance: .x ± 0.1 unless otherwise noted

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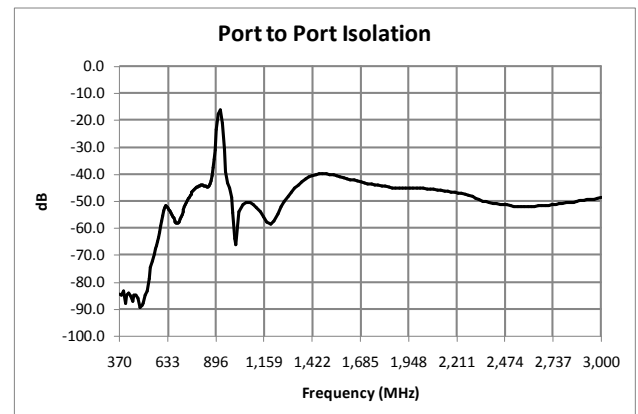
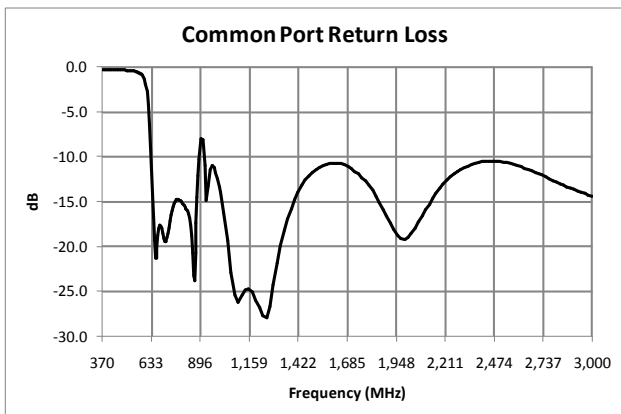
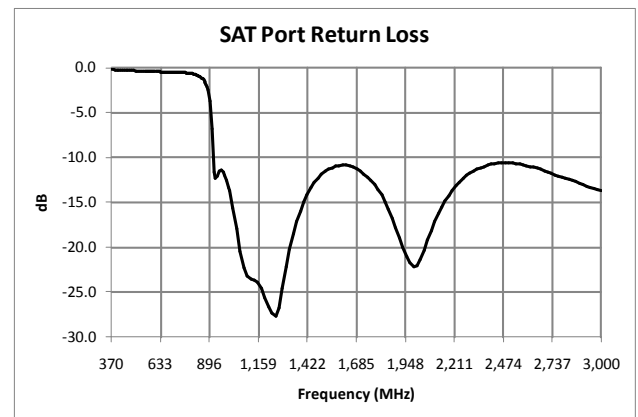
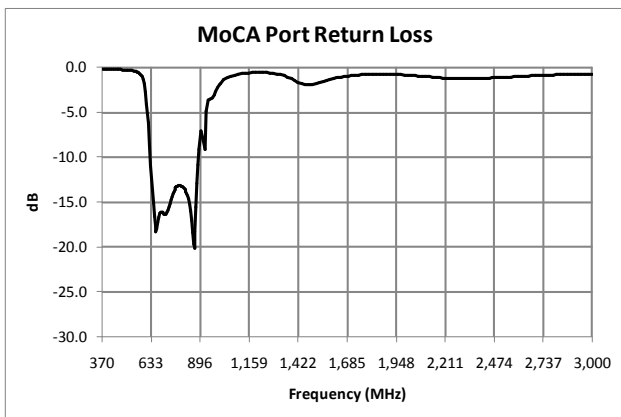
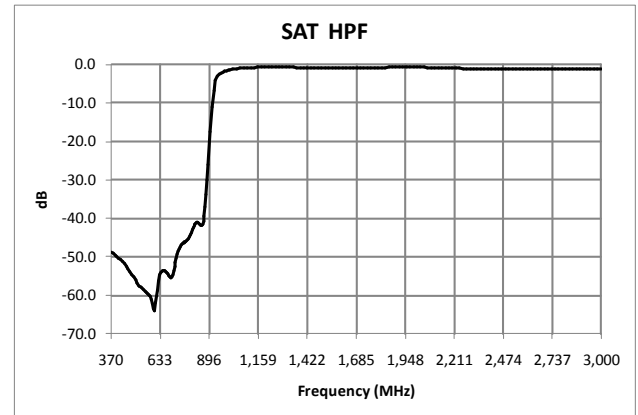
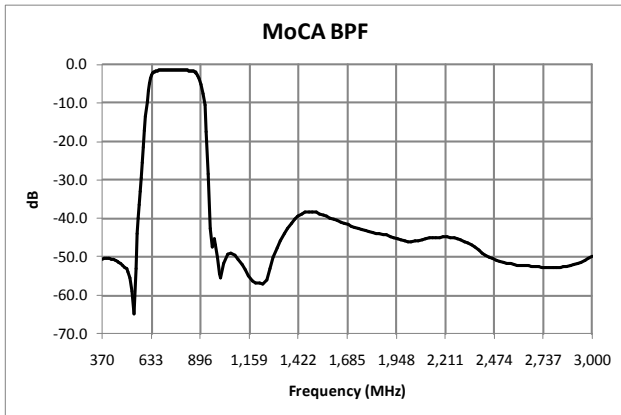
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Typical Performance Curves at +25°C



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