FL07-0002-G

Low Cost SMT Low Pass Filter DC – 2000 MHz



Rev. V2

Features

- Small Size and Low Profile
- Superior Repeatability
- Typical Insertion Loss 0.6 dB
- Typical Rejection 20 dB
- 2 Watt Power Handling
- SOIC-8 Package

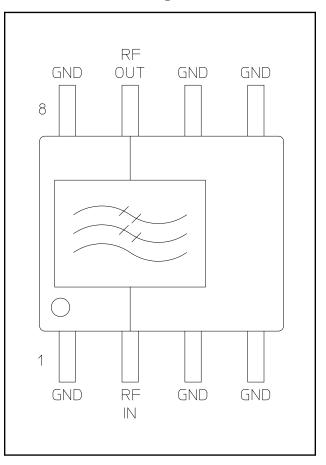
Description

M/A-COM's FL07-0002-G is an IC-based monolithic low pass filter in a low cost SOIC-8 plastic package. The filter is ideally suited for applications where small size, low cost and low loss are required.

Typical applications include base station switching networks and portable phones where size and PCB real estate are at a premium. Available in tape and reel.

The FL07-0002-G is fabricated using a passiveintegrated circuit process. The process features fullchip passivation for increased performance and reliability.

Functional Block Diagram



1. All unused pins must be RF and DC grounded.

2. Pins 1 and 4 are thermal ground contacts.

Part NumberPackageFL07-0002-GBulk PackagingFL07-0002-G-TR1000 piece reelFL07-0002-GSAMSample Test Board

Note: Reference Application Note M513 for reel size information.

Ordering Information

Pin Configuration

Pin No.	Function	Pin No.	Function
1	GND	5	GND
2	RF IN	6	GND
3	GND	7	RF OUT
4	GND	8	GND

North America Tel: 800.366.2266
Europe Tel: +353.21.244.6400
India Tel: +91.80.4155721
China Tel: +86.21.2407.1588

Visit www.macomtech.com for additional data sheets and product information.

PRELIMINARY: Data Sheets contain information regarding a product M/A-CUM rechnology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

¹

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Electrical Specifications: $T_A = 25^{\circ}C$, $Z_0 = 50\Omega$

	Parameter	Units	Min	Тур	Max
Insertion Loss:	DC – 2000 MHz	dB	_	0.6	1.0
VSWR:	DC – 2000 MHz	—	—	1.6:1	2.0:1
Rejection:	3500 – 4000 MHz 4000 – 6000 MHz	dB dB	15 20	20 30	_

Absolute Maximum Ratings ^{3,4}

Parameter	Absolute Maximum		
Input Power	2 W CW		
Operating Temperature	-40°C to +85°C		
Storage Temperature	-65°C to +150°C		

3. Exceeding any one or combination of these limits may cause permanent damage to this device.

 M/A-COM does not recommend sustained operation near these survivability limits.

Handling Procedures

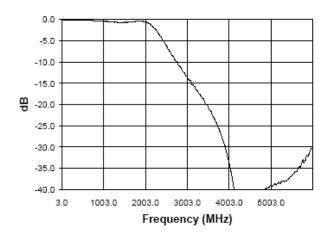
Please observe the following precautions to avoid damage:

Static Sensitivity

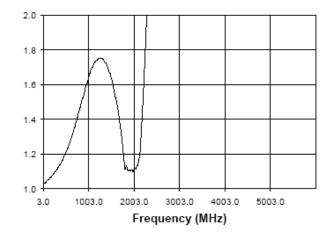
GMIC Circuits are sensitive to electrostatic discharge (ESD) and can be damaged by static electricity. Proper ESD control techniques should be used when handling these devices.

Typical Performance Curves

Insertion Loss vs. Frequency



VSWR vs. Frequency



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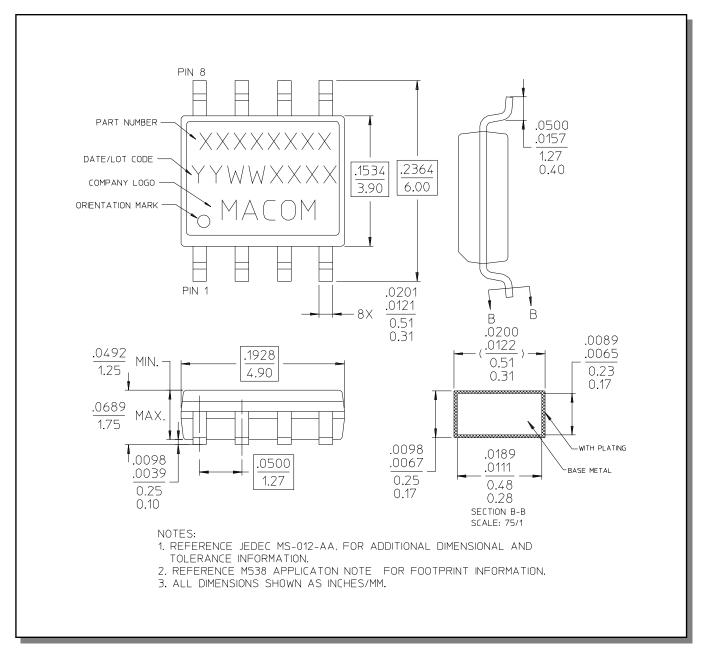
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Rev. V2

SOIC-8[†]



[†] Reference Application Note M538 for lead-free solder reflow recommendations.

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