

## 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

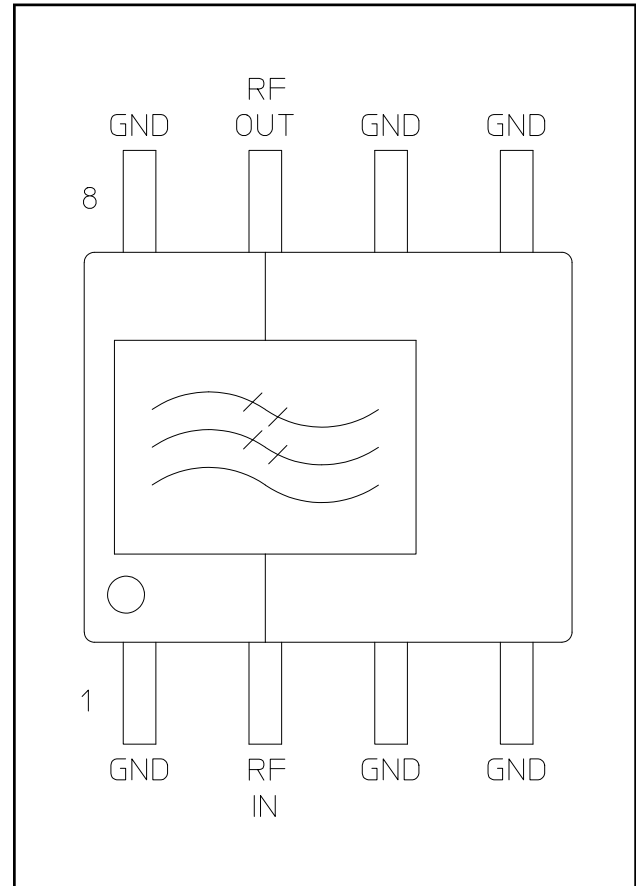
## Description

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 passive-integrated circuit process. The process features full-chip 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.

## Ordering Information

Part Number	Package
FL07-0002-G	Bulk Packaging
FL07-0002-G-TR	1000 piece reel
FL07-0002-GSAM	Sample Test Board

Note: Reference Application Note M513 for reel size 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

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

Parameter	Units	Min	Typ	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	15	20	—
	4000 – 6000 MHz	20	30	—

## Absolute Maximum Ratings <sup>3,4</sup>

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

- 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

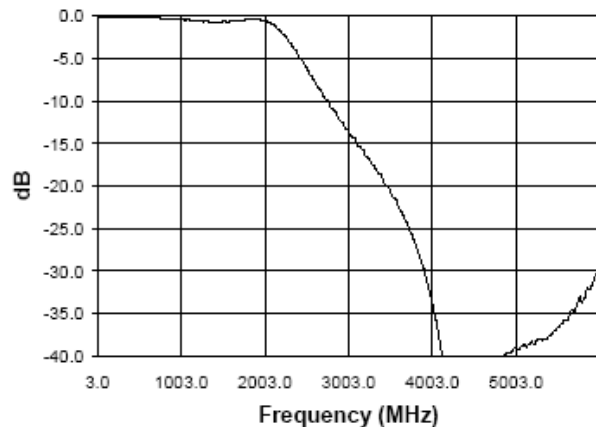
Please observe the following precautions to avoid damage:

## Static Sensitivity

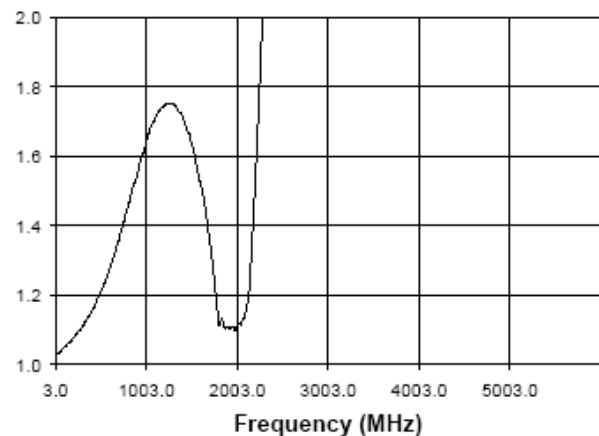
GMIC Circuits are sensitive to electrostatic discharge (ESD) and can be damaged by static electricity. Proper ESD control techniques should be used when handling these devices.

## Typical Performance Curves

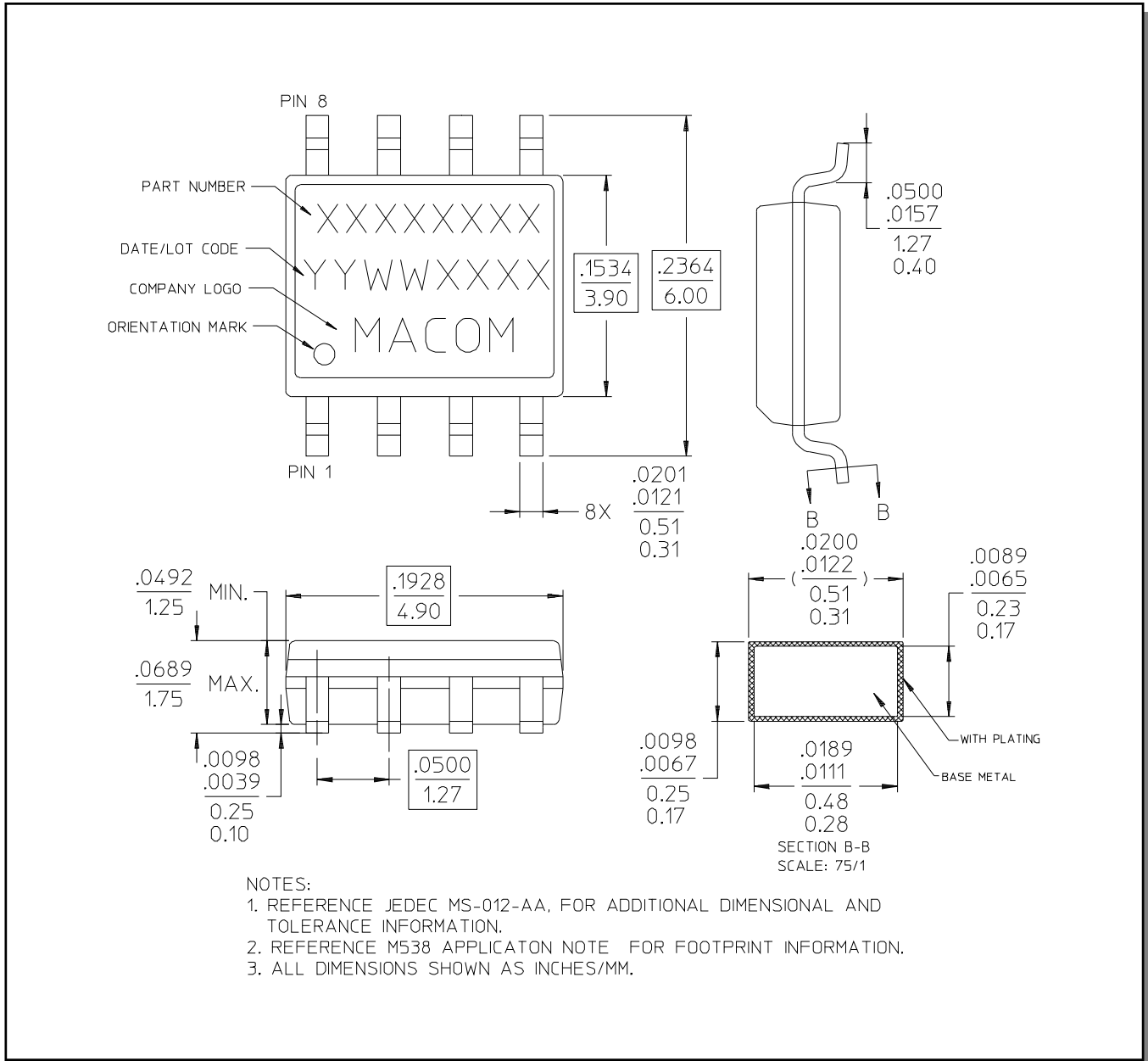
*Insertion Loss vs. Frequency*



*VSWR vs. Frequency*



## SOIC-8<sup>†</sup>



<sup>†</sup> Reference Application Note M538 for lead-free solder reflow recommendations.