

## TECHNICAL DESCRIPTION / APPLICATION

### MULTI-MIX<sup>®</sup> FILTERS

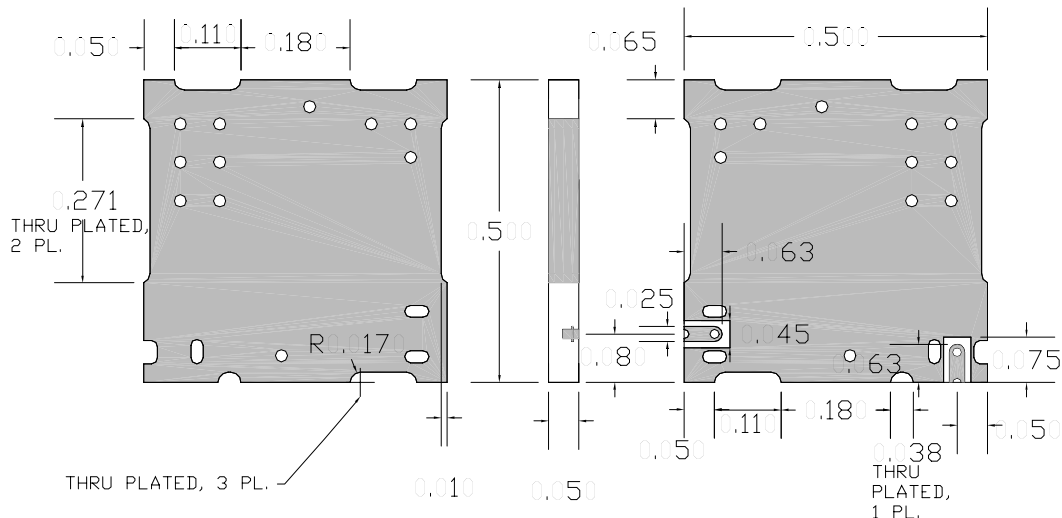
Merrimac's FBGI Series bandpass filters combine the features of Merrimac's patented Multi-Mix<sup>®</sup> multilayer fabrication technology with the ability to operate to three times their center frequency without reentrant spurious passbands. They typically offer better overall performance than filters designed to the same specification with conventional filter fabrication techniques.



## GENERAL SPECIFICATIONS

| FILTER TYPE      | CENTER FREQUENCY   | 1 dB OPERATING BANDWIDTH (MHz MIN)                       | INSERTION LOSS @ CENTER FREQUENCY | REJECTION   | VSWR (MAX)           |
|------------------|--------------------|--|-----------------------------------|---|----------------------|
| BANDPASS         | 3.84 GHz Nominal   | 400  | 0.8 dB (MAX)                      | -30 dB MIN. @ 2.0 GHz<br>-20 dB MIN. @ 5.4 GHz<br>-30 dB MIN. @ 7.2 GHz | 1.5:1 @ 3.84±0.1 GHz |
| SIZE (INCHES)    | WEIGHT (GRAMS/OZ.) | RF INTERFACE/CONNECTIONS                                 |                                   | OPERATING TEMPERATURE   |                      |
| 0.5 x 0.5 x 0.05 | 0.6 / 0.02         | SMT or 50 Ohm, co-planar waveguide launch with gold pads |                                   | -55° - +85° C   |                      |

## PACKAGE OUTLINE



- NOTES:  
1. ALL DIMENSIONS ARE IN INCHES.  
2. TOLERANCES: -3 PLACE DECIMALS; ±.005.

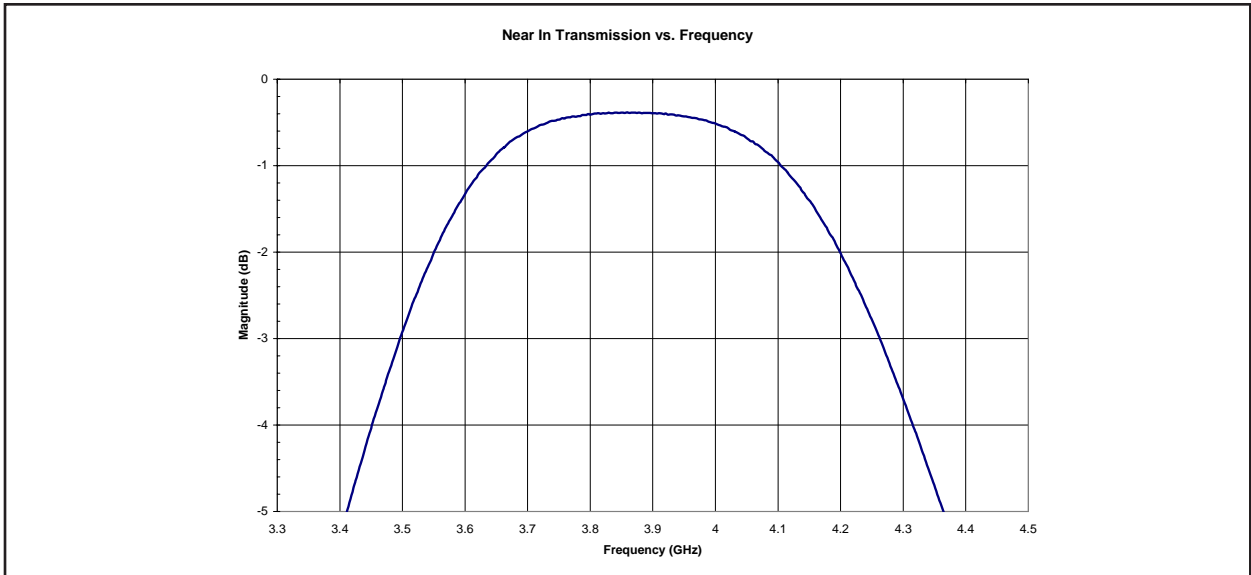
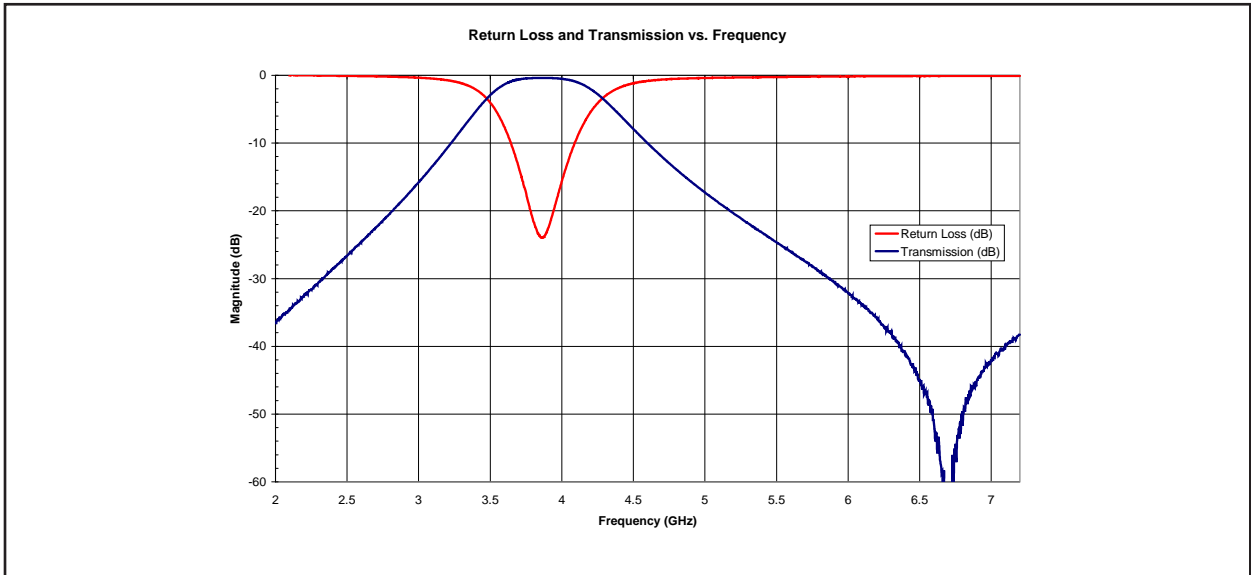
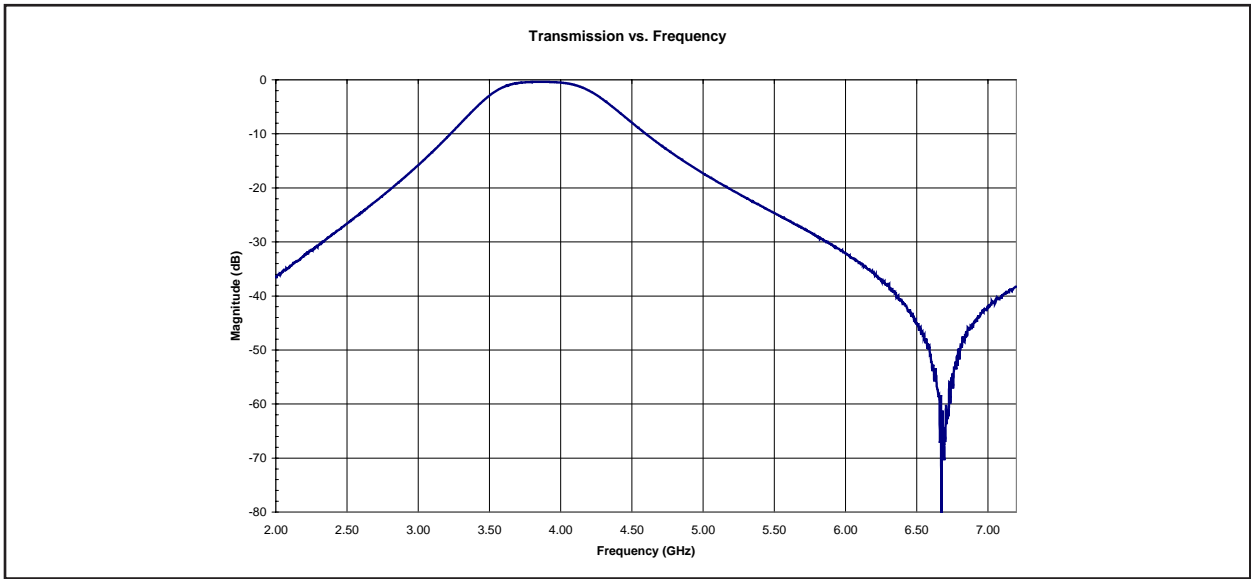
THE MULTI-MIX MICROTECHNOLOGY<sup>®</sup> GROUP IS ISO 9001:2000 REGISTERED



U.S. patent 6,099,677 and other patents pending.

# TYPICAL PERFORMANCE

FBGI-3.84G



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