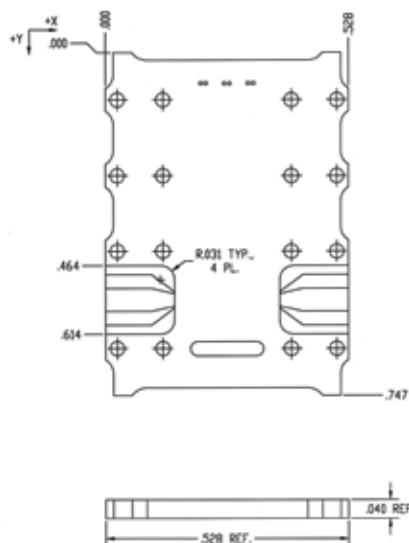
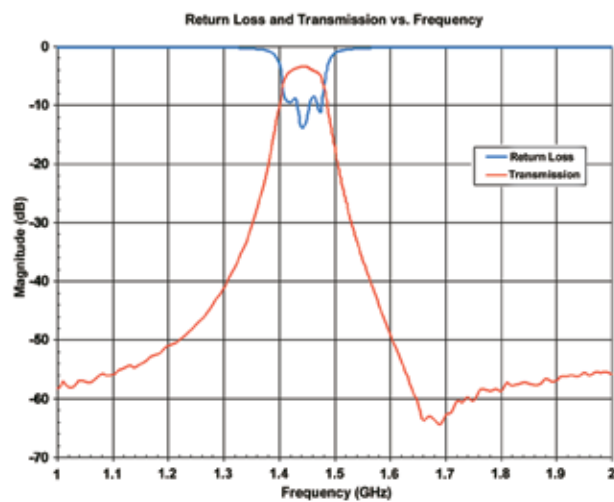
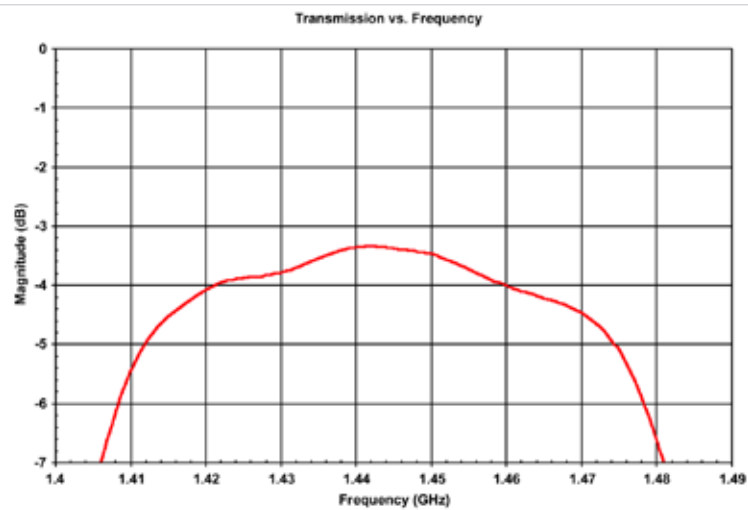
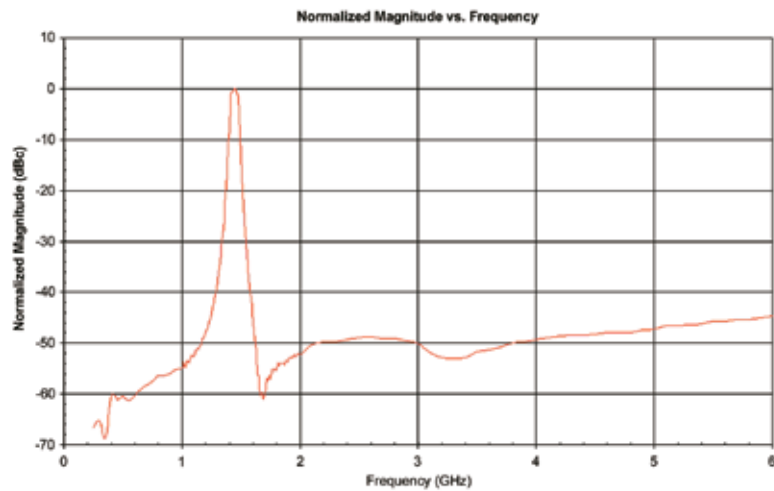




FILTER - FBGC-1.44G**PERFORMANCE DATA**

FILTER - FBGC-2.75G

TECHNICAL FEATURE

FEATURES

- Up to 40 GHz
- Low Loss
- No Tuning
- Surface Mount
- Tape and Reel Available
- Low Cost



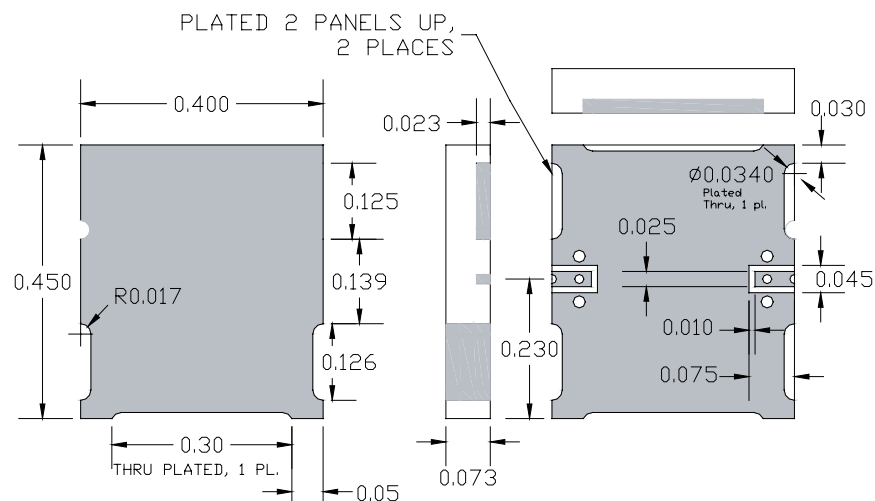
PERFORMANCE

Filter Type	Bandpass
Center Frequency.....	2750 MHz Nominal
3 dB Operating Bandwidth	550 MHz min.
Insertion Loss @ Center Frequency	1.5 dB max.
Rejection.....	-40 dB min. @ 2.2 GHz
.....	-30 dB min. @ 3.3 GHz
VSWR.....	2.0:1 @ 1400 ± 250 MHz max.
RF Interface/Connections.....	SMT
Operating Temperature	-55° to +85° C

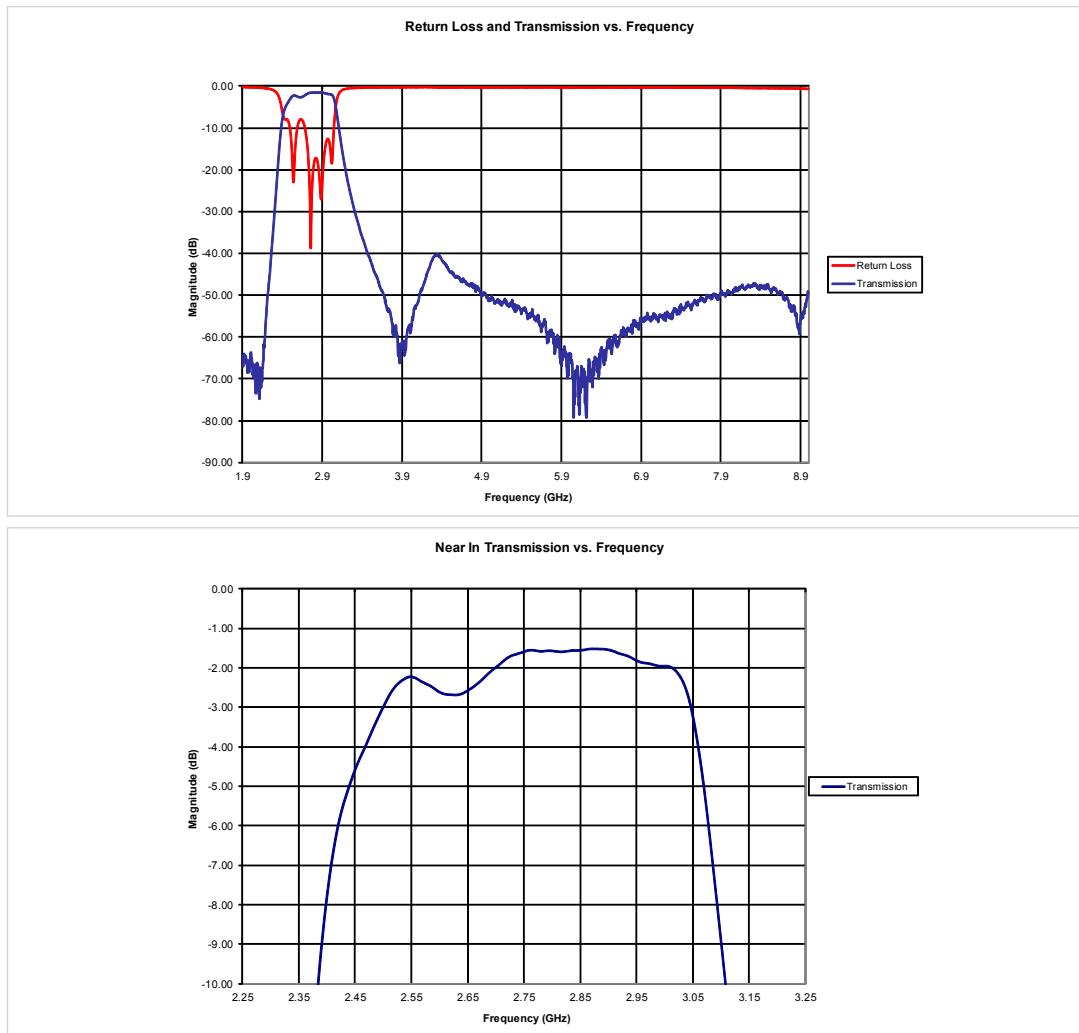
DESCRIPTION

Merrimac's FGBC Series filters allow very wide stopband rejection to be achieved in very small enclosures without the appearance of reentrant spurious passbands. In addition, they require no tuning once incorporated in a circuit, making their already economical design even more cost-effective, especially in high-volume production. The FGBC Series filters incorporate all of the advantages provided by Merrimac's patented Multi-Mix® multilayer fabrication process, and are an excellent choice for applications in which size and weight are critical.

PACKAGE OUTLINE



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

FILTER - FBGC-2.75G**PERFORMANCE DATA**

FILTER - FBGC-3-1.4G

TECHNICAL FEATURE

FEATURES

- Low Loss
- No Tuning
- Surface Mount
- Tape and Reel Available
- Low Cost



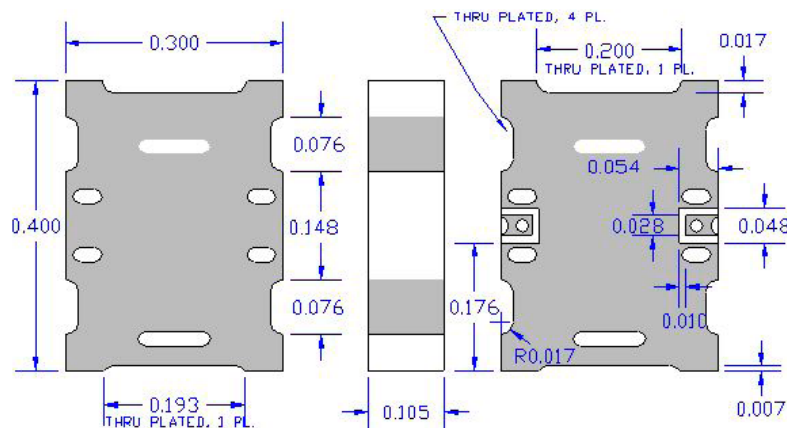
PERFORMANCE

Filter Type	Bandpass
Center Frequency.....	1400 MHz Nominal
3 dB Operating Bandwidth	600 MHz min.
Insertion Loss @ Center Frequency	1.0 dB max.
Rejection.....	-15 dB min. @ 700 MHz
.....	-20 dB min. (3.0-13.0 GHz)
VSWR.....	2.0:1 @ 1400 ± 250 MHz max.
Power	40.0 dBm CW typ.
RF Interface/Connections.....	SMT
Operating Temperature	-55° to +85° C

DESCRIPTION

Merrimac's FGBC Series filters allow very wide stopband rejection to be achieved in very small enclosures without the appearance of reentrant spurious passbands. In addition, they require no tuning once incorporated in a circuit, making their already economical design even more cost-effective, especially in high-volume production. The FGBC Series filters incorporate all of the advantages provided by Merrimac's patented Multi-Mix® multilayer fabrication process, and are an excellent choice for applications in which size and weight are critical.

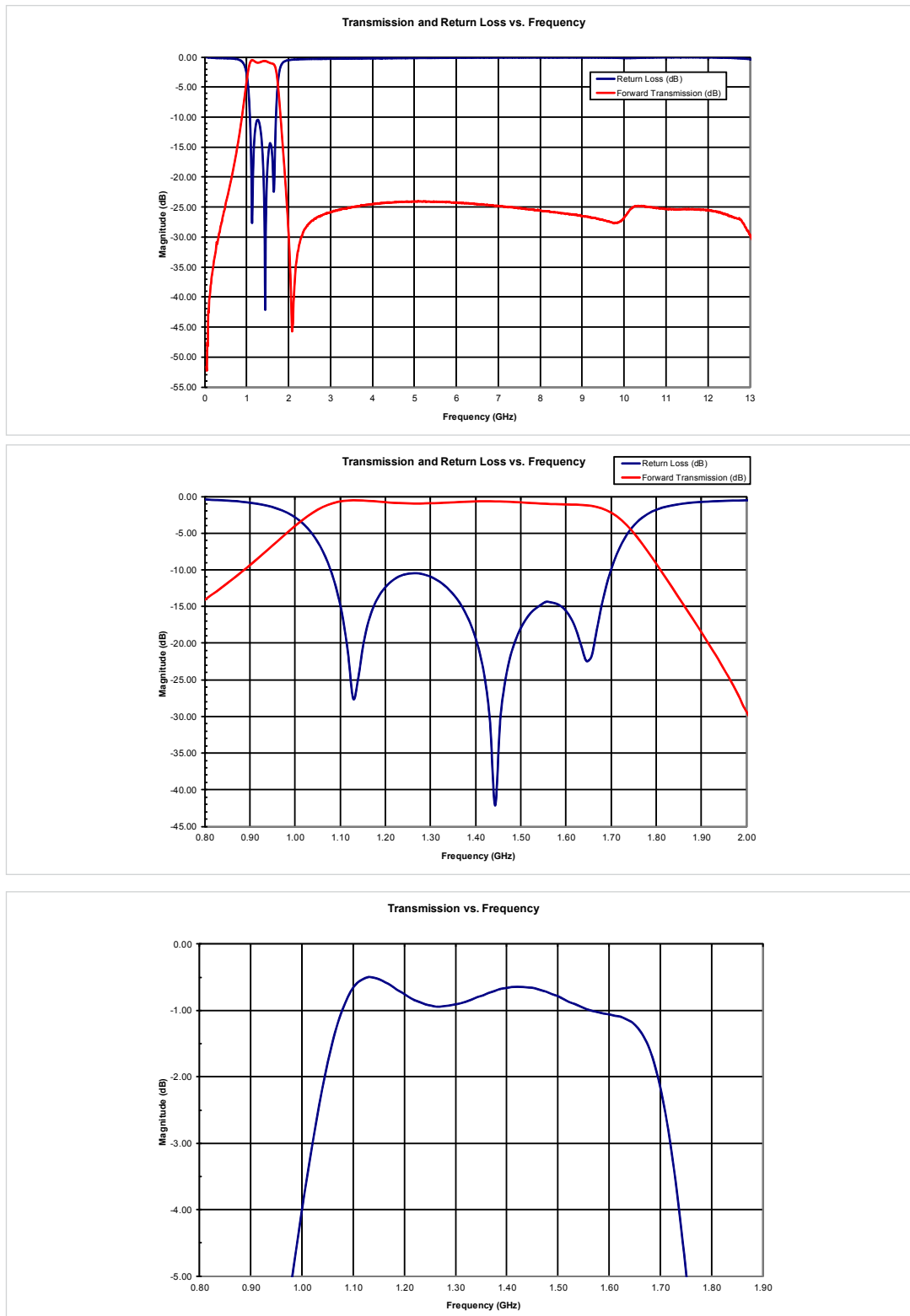
PACKAGE OUTLINE



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

FILTER - FBGC-3-1.4G

PERFORMANCE DATA



FILTER - FBGC-3-1.575G

TECHNICAL FEATURE

FEATURES

- Low Loss
- No Tuning
- Surface Mount
- Tape and Reel Available
- Low Cost



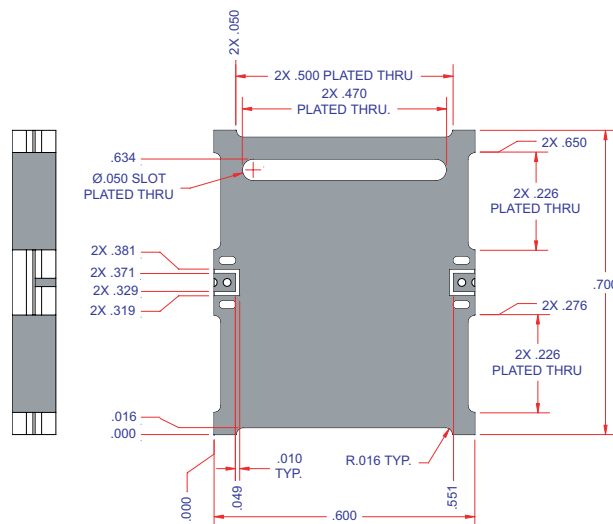
PERFORMANCE

Filter Type	Bandpass
Center Frequency.....	1575 MHz Nominal
3 dB Operating Bandwidth	80 MHz min.
Insertion Loss @ Center Frequency	1.0 dB nom.
.....	1.5 dB max.
Rejection.....	-45 dB min. @ 1.0 GHz
.....	-20 dB min. @ 1.35 GHz
VSWR.....	1.5:1 @ 1575 ± 20 MHz max.
RF Interface/Connections.....	SMT
Operating Temperature	-55° to +85° C

DESCRIPTION

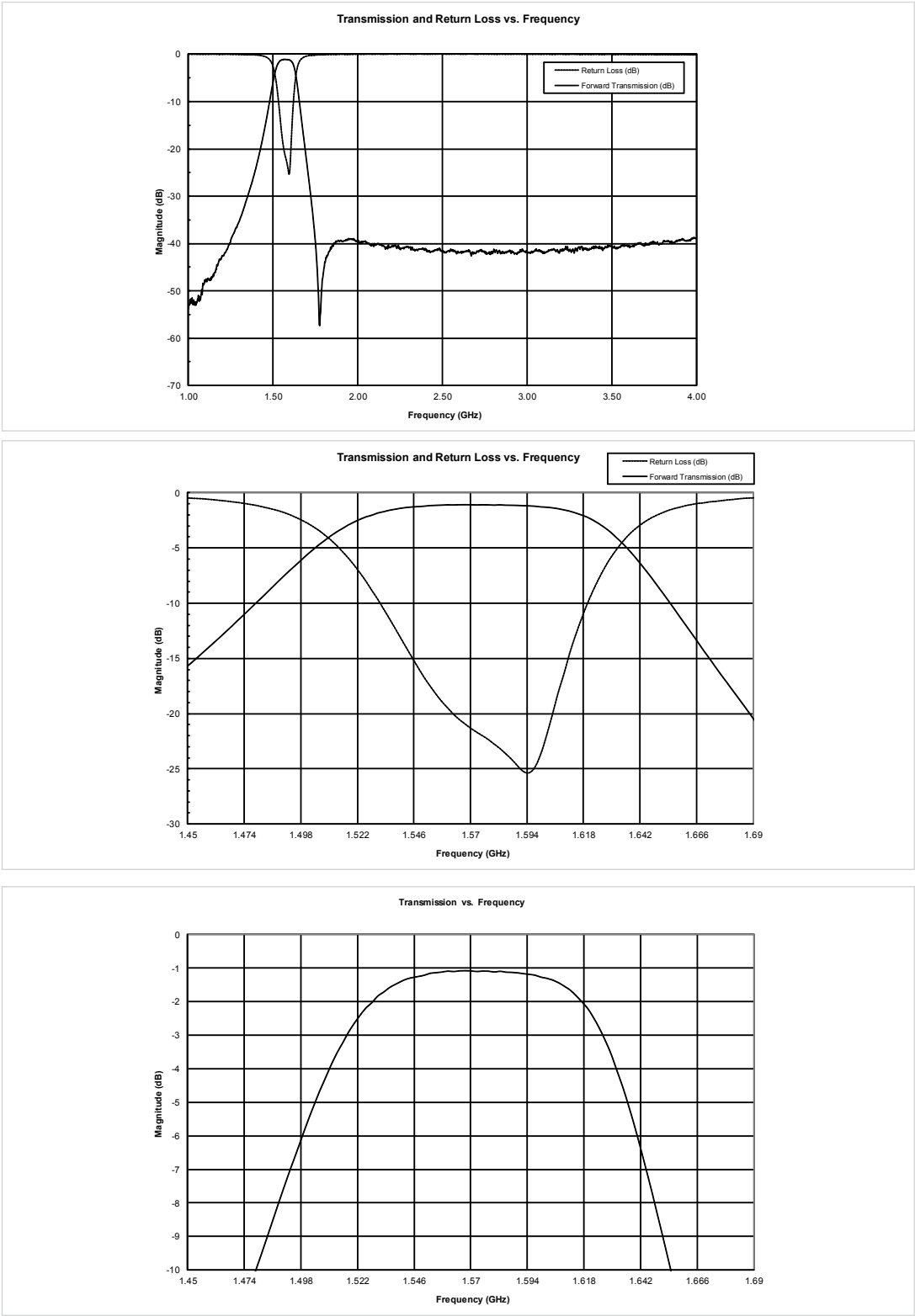
Merrimac's FGBC Series filters allow very wide stopband rejection to be achieved in very small enclosures without the appearance of reentrant spurious passbands. In addition, they require no tuning once incorporated in a circuit, making their already economical design even more cost-effective, especially in high-volume production. The FGBC Series filters incorporate all of the advantages provided by Merrimac's patented Multi-Mix® multilayer fabrication process, and are an excellent choice for applications in which size and weight are critical.

PACKAGE OUTLINE



FILTER - FBGC-3-1.575G

PERFORMANCE DATA



FILTER - FBGI-2.2G

TECHNICAL FEATURE

FEATURES

- Low Loss
- No Tuning
- Surface Mount
- Tape and Reel Available
- Low Cost



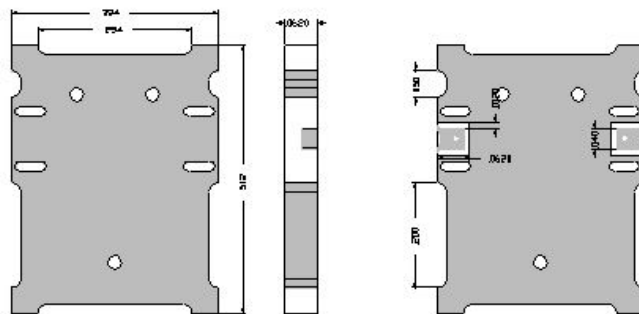
PERFORMANCE

Filter Type	Bandpass
Center Frequency.....	2.2 GHz nom.
3 dB Operating Bandwidth	400 MHz min.
Insertion Loss @ Center Frequency	1.0 dB nom.
.....	2.0 dB max.
Rejection.....	-50 dB min. @ 1.3 GHz
.....	-50 dB min. @ 3.3 GHz
VSWR.....	2.0:1 max. @ 2.2 ± 0.1 GHz
RF Interface/Connections.....	SMT o
Operating Temperature	-55° to +85° C

DESCRIPTION

Merrimac's FBGI Series bandpass filters combine the features of Merrimac's patented Multi-Mix® 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.

PACKAGE OUTLINE

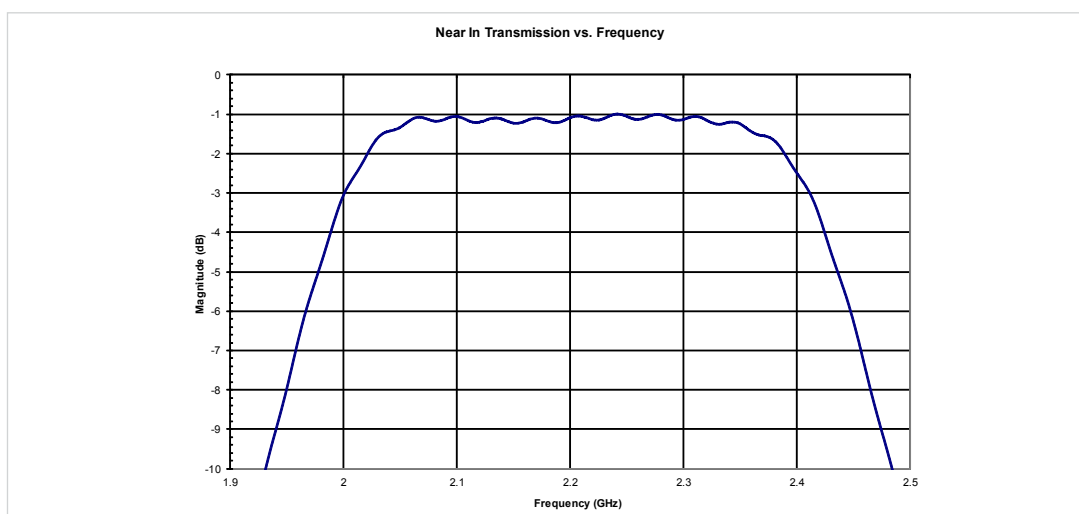
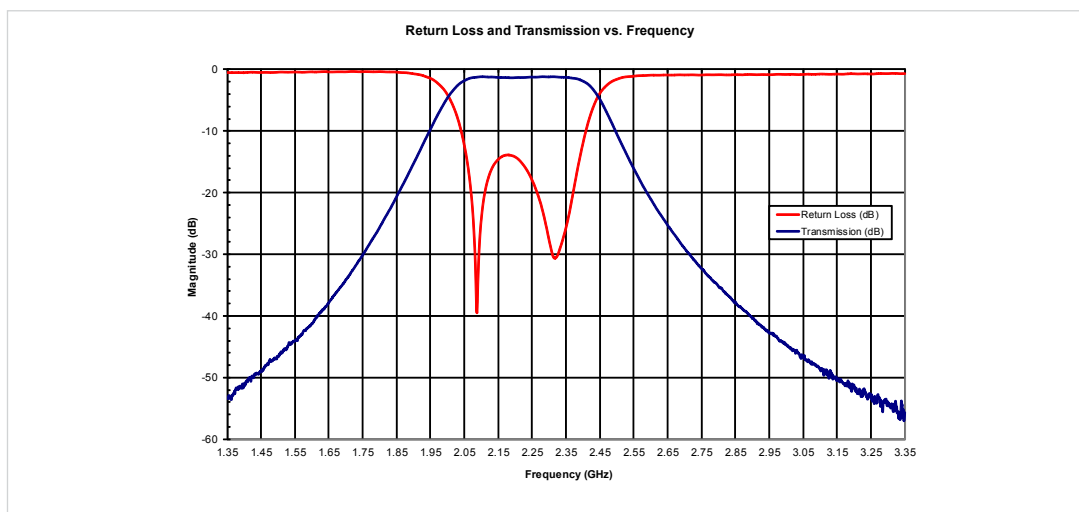
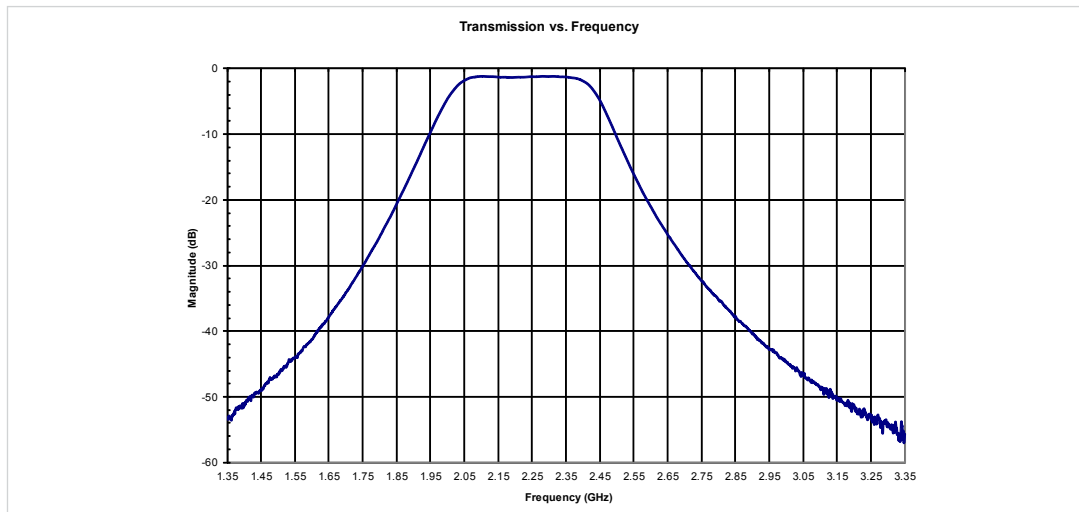


NOTES:

1. TOLERANCE ON THREE PLACE DECIMALS $\pm .010$ EXCEPT AS NOTED.
2. ALL DIMENSIONED UNITS ARE IN INCHES.

FILTER - FBGI-2.2G

PERFORMANCE DATA



FILTER - FBGI-1.25G

TECHNICAL FEATURE

FEATURES

- Low Loss
- No Tuning
- Surface Mount
- Tape and Reel Available
- Low Cost



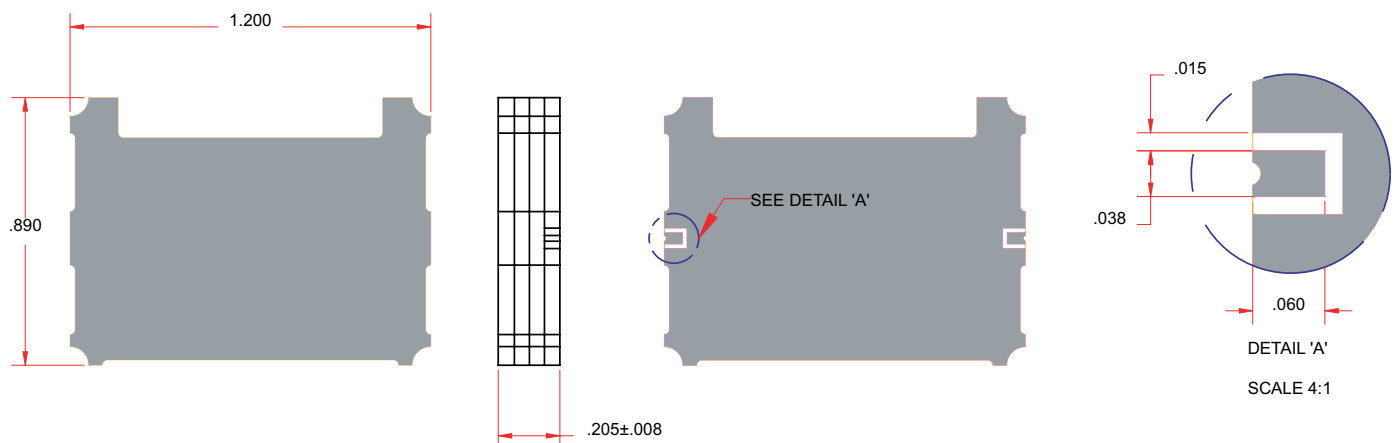
PERFORMANCE

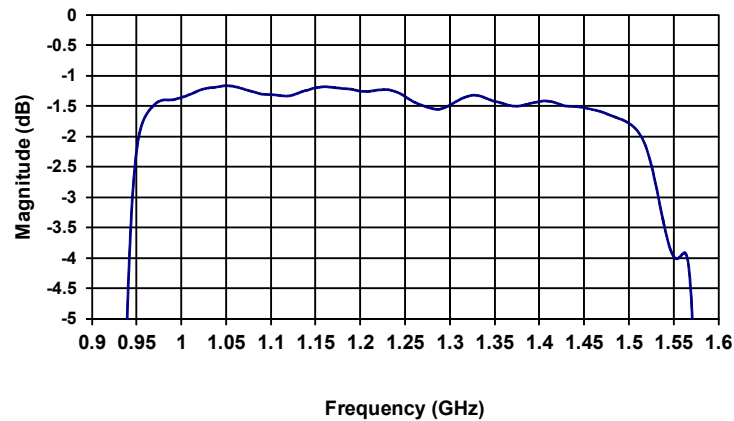
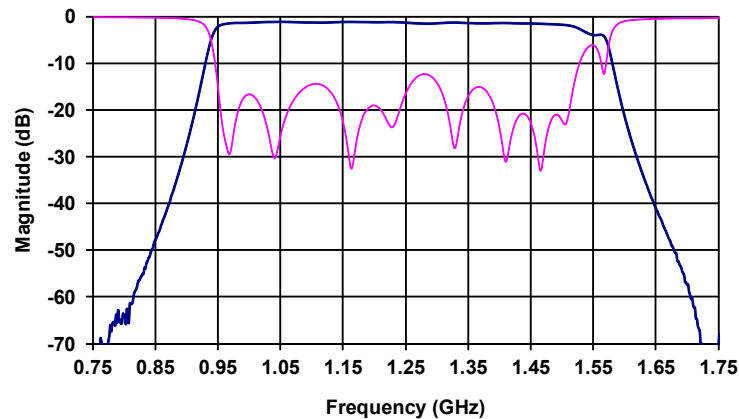
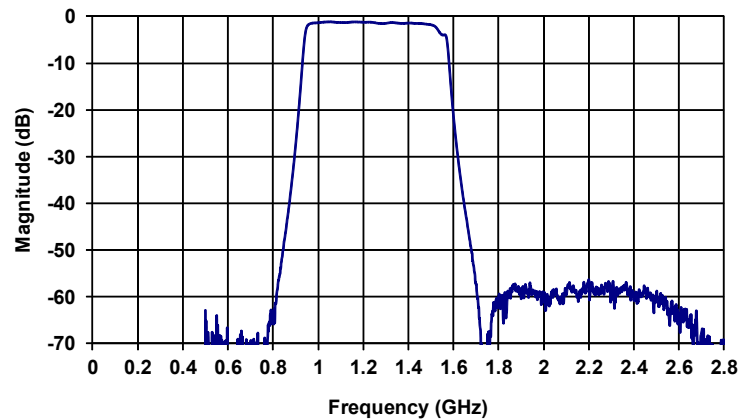
Filter Type	Bandpass
Center Frequency.....	1250 MHz nom.
1 dB Operating Bandwidth	520 MHz min.
Insertion Loss @ Center Frequency	1.7 dB nom.
.....	2.5 dB max.
Rejection.....	-50 dB min. @ 800 MHz
.....	-50 dB min. @ 1700 - 2800 MHz
VSWR.....	1.92:1 @ $F_c \pm 0.2$ GHz
RF Interface/Connections.....	SMT
Operating Temperature	-55° to +85° C

DESCRIPTION

Merrimac's FBGI Series bandpass filters combine the features of Merrimac's patented Multi-Mix® 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.

PACKAGE OUTLINE



FILTER - FBGI-1.25G**PERFORMANCE DATA****Near InTransmission Vs. Frequency****Return Loss and Transmission Vs. Frequency****Transmission Vs. Frequency**

FILTER - FBGI-5.89G

TECHNICAL FEATURE

FEATURES

- Low Loss
- No Tuning
- Surface Mount
- Tape and Reel Available
- Low Cost



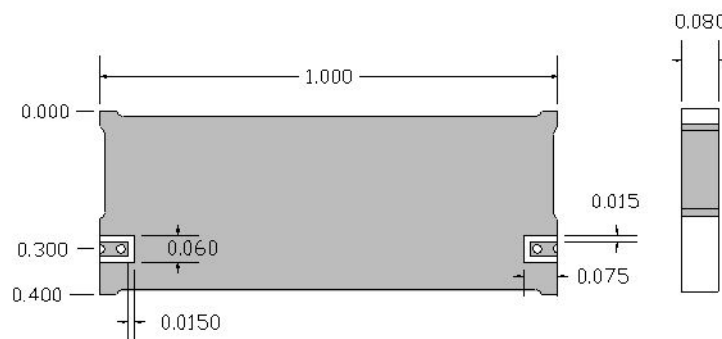
PERFORMANCE

Filter Type	Bandpass
Center Frequency.....	5893 MHz nom.
1 dB Operating Bandwidth	400 MHz min.
Insertion Loss @ Center Frequency	3.5 dB max.
Rejection.....	40 dB min. @ DC-4900 MHz
.....	50 dB min. @ 4900-5243 MHz
.....	50 dB min. @ 6603-6900 MHz
.....	40 dB min. @ 6900-8000 MHz
VSWR.....	1.7:1 max. @ $F_c \pm 0.1$ GHz
RF Interface/Connections.....	SMT
Operating Temperature	-55° to +85° C

DESCRIPTION

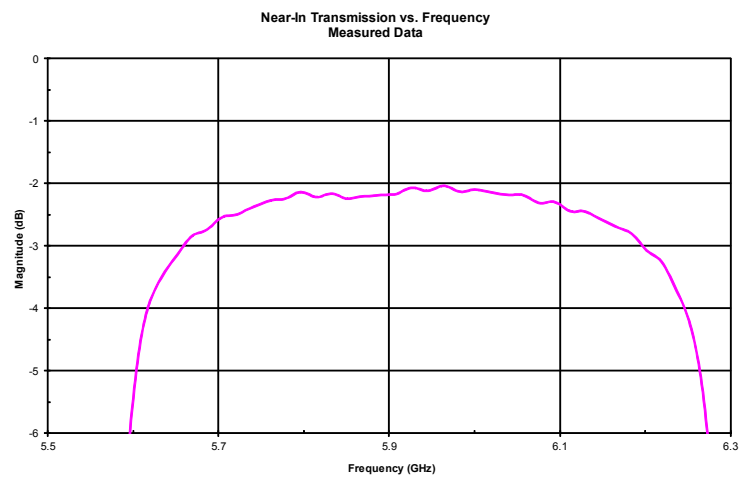
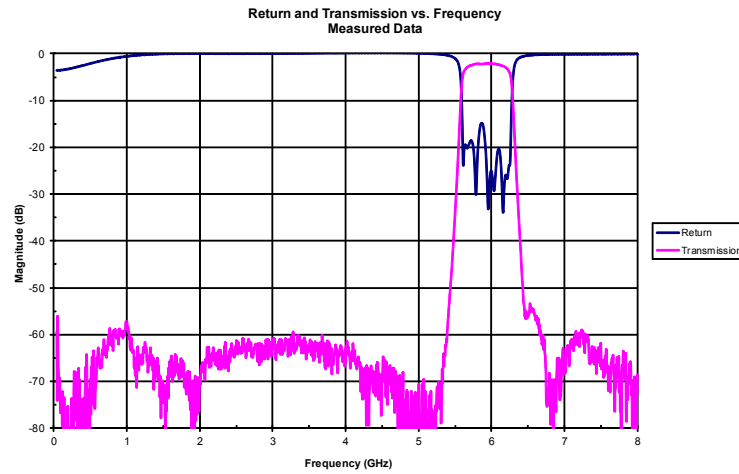
Merrimac's FBGI Series bandpass filters combine the features of Merrimac's patented Multi-Mix® multilayer fabrication technology with the ability to operate to three times their center frequency without reentrant spurious passbands. They typically offer better overall performance than filters designed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

PACKAGE OUTLINE



FBGI-5.89G

NOTES:
1. ALL DIMENSIONS ARE IN INCHES.
2. TOLERANCES: .3 PLACE DECIMALS; $\pm .005$.

FILTER - FBGI-5.89G**PERFORMANCE DATA**

FILTER - FBMM-42.0G

TECHNICAL FEATURE

FEATURES

- Low Loss
- No Tuning
- SMT Compatible
- Small & Light Weight
- Low Cost

PERFORMANCE

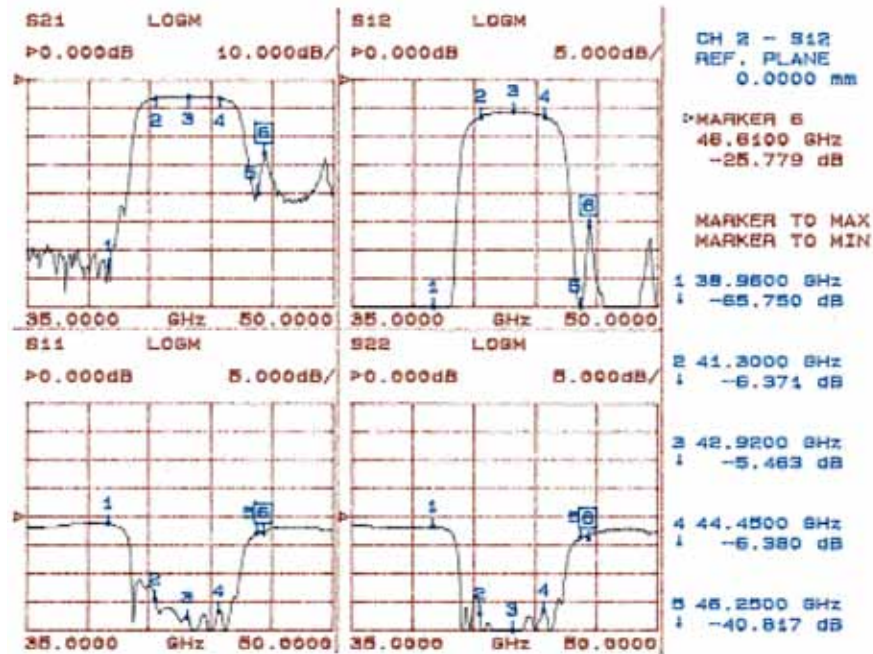
Filter Type Bandpass
 Operating Bandpass 3 GHz
 Passband Insertion Loss* 3 dB typ.
 Input/Output Return Loss 15 dB max.
 Rejection 60 dB min. @ 38.5 GHz
 30 dB min. @ 46.0 GHz
 Power 1W typ.
 RF Interface/Connections SMT/Gold Plating
 Operating Temperature -55° to +125° C

MILTRON
 380 NETWORK ANALYZER

MODEL: FBMM 42.0G DATE: 8/16/03
 DEVICE: B-1 30.000 GHz 7/13/03 OPERATOR:

START: 35.0000 GHz GATE START:
 STOP: 50.0000 GHz GATE STOP:
 STEP: 0.0900 GHz GATE:
 WINDOW:

ERROR CORR: 12 - TERM
 AVERAGING: 1 PTS
 IF BANDWIDTH: MINIMUM



UNIT SELECTED TO FIXTURE

DS_Filter_FBMM42G_082203.indd. This revision supersedes all previous releases. All technical information is believed to be accurate, but no responsibility is assumed for errors. We reserve the right to make changes in products or specifications without notice. Copyright © 2012 Crane Electronics, Inc. All rights reserved.