

# Ceramic Bandpass Filter

## BFCG-5600+

50Ω 5150 to 5990 MHz



Generic photo used for illustration purposes only

CASE STYLE: GE0805C-3

### Features

- Low loss < 2.0 dB typ.
- Rejection up to 16 GHz
- Small size (0.079" x 0.049" x 0.037")
- Temperature stable
- Hermetically sealed

**+RoHS Compliant**  
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

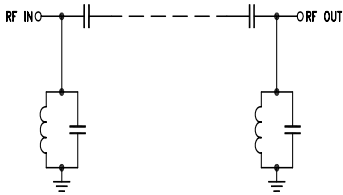
### Applications

- Harmonic Rejection
- Transmitters / Receivers
- WiFi / WLAN

### Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Center Frequency	—		5600		dB	
	Insertion Loss	F1 - F2	5150 - 5990	—	1.2	2.2	dB
	VSWR	F1 - F2	5150 - 5990	—	1.6	—	:1
Stop Band, Lower	Insertion Loss	DC - F3	DC - 4200	—	25	—	dB
	VSWR	DC - F3	DC - 4200	—	30	—	:1
Stop Band, Upper	Insertion Loss	F4 - F5	9310 - 15750	—	20	—	dB
	VSWR	F4 - F5	9310 - 15750	—	40	—	:1

### Functional Schematic



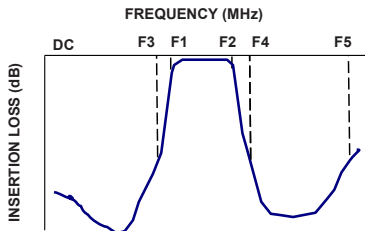
### Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature <sup>1</sup>	-55°C to 100°C
RF Power Input <sup>2</sup>	0.5W at 25°C

1. 12 months max.

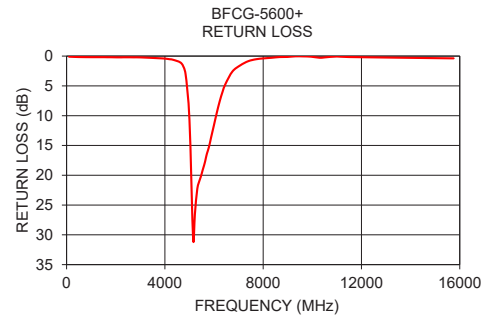
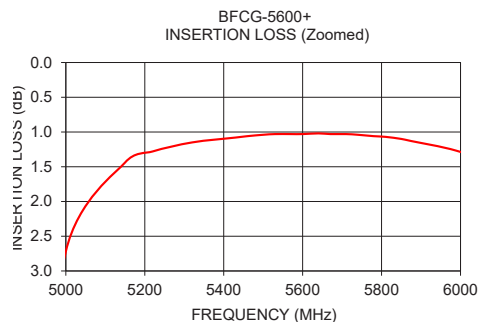
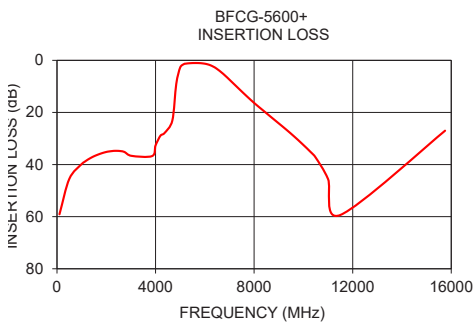
2. Passband rating, derate linearly to 0.125W at 85°C ambient  
Permanent damage may occur if any of these limits are

### Typical Frequency Response



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
100	59.09	174.29
500	45.49	110.80
1000	39.81	95.13
2510	34.76	86.40
3020	36.65	78.27
4200	28.90	32.67
4840	9.06	5.90
5150	1.44	1.06
5990	1.27	1.70
6470	3.13	3.83
8030	16.59	46.23
9310	26.63	386.49
10300	35.24	61.58
11500	59.35	109.64
15750	27.00	45.89



### Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)



[www.minicircuits.com](http://www.minicircuits.com) P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

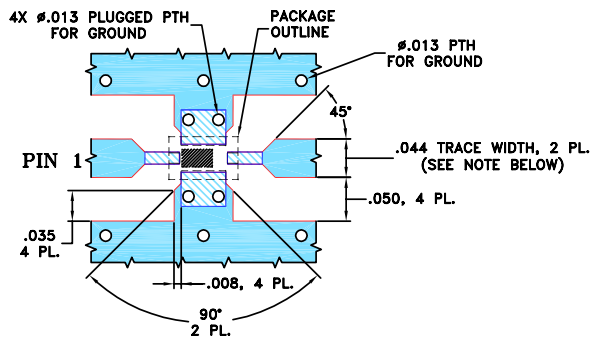
REV. A  
M151107  
ED-15034  
BFCG-5600+  
WZ/CP/AM  
200611  
Page 1 of 2

## Pad Connections

INPUT	1
OUTPUT	3
GROUND	2,4

## Product Marking: N/A

Evaluation Board MCL P/N: TB-703+  
Suggested PCB Layout (PL-397)



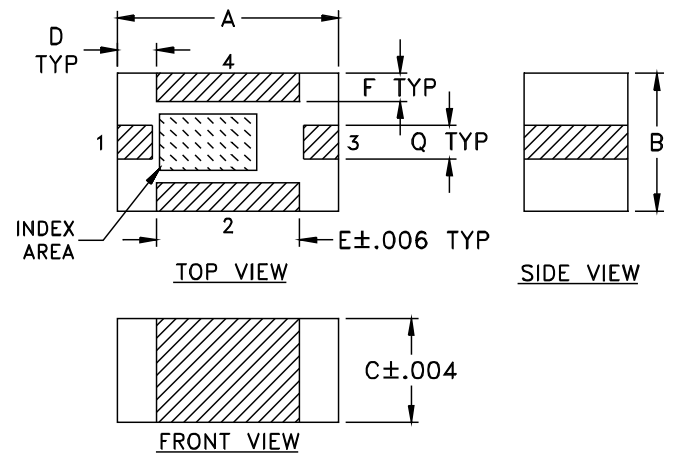
### NOTES:

- TRACE WIDTH IS SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS  $.020 \pm .0015$ ". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
- BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER).

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK.

## Outline Drawing



### Outline Dimensions ( $\frac{\text{inch}}{\text{mm}}$ )

A	B	C	D	E	F	Q	wt
.079	.049	.037	.014	.051	.010	.012	grams
2.01	1.24	0.94	0.36	1.30	0.25	0.30	.020

### Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Mini-Circuits:](#)

[BFCG-5600+](#)