

# Ceramic Low Pass Filter

50Ω DC to 2600 MHz

## LFCN-2600+ LFCN-2600



### Maximum Ratings

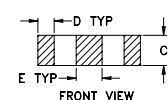
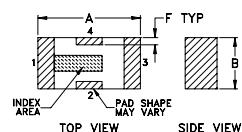
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	10W max. at 25°C

\* Passband rating, derate linearly to 3.5W at 100°C ambient.

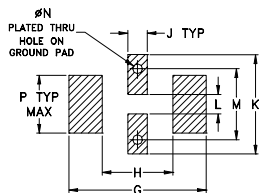
### Pin Connections

RF IN	1
RF OUT	3
GROUND	2,4

### Outline Drawing



#### PCB Land Pattern



Suggested Layout,  
Tolerance to be within ±.002

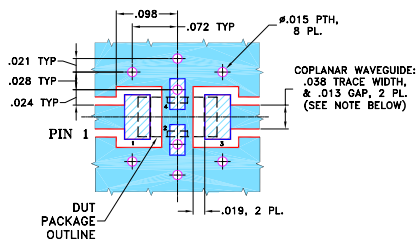
### Outline Dimensions (inch)

A	B	C	D	E	F	G
.126	.063	.037	.020	.032	.009	.169
3.20	1.60	0.94	0.51	0.81	0.23	4.29

H	J	K	L	M	N	P	wt
.087	.024	.122	.024	.087	.012	.071	grams
2.21	0.61	3.10	0.61	2.21	0.30	1.80	.020

### Demo Board MCL P/N: TB-270 Suggested PCB Layout (PL-137)



- NOTES:
- COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH THICKNESS .020" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & 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

### Features

- excellent power handling, 10W
- small size
- 7 sections
- temperature stable
- protected by U.S. Patent 6,943,646

### Applications

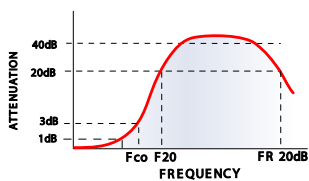
- harmonic rejection
- VHF/UHF transmitters/receivers
- lab use

### Electrical Specifications<sup>1</sup> (T<sub>AMB</sub> = 25°C)

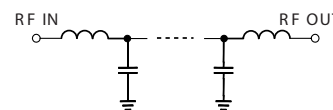
PASSBAND (MHz) (loss < 1.2 dB)	f <sub>co</sub> , MHz Nom. (loss 3 dB)	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
		F 20	30	FR 20	Stopband	Passband	
Max.	Typ.	Min.	Typ.	Typ.	Typ.	Typ.	
DC-2600	3125	3750	3900-6600	8400	20	1.2	7

1. For applications requiring DC voltage to be applied to the Input or output, use LFCN-2600D+ (DC Resistance to ground is 100 Mohms min.)

### typical frequency response

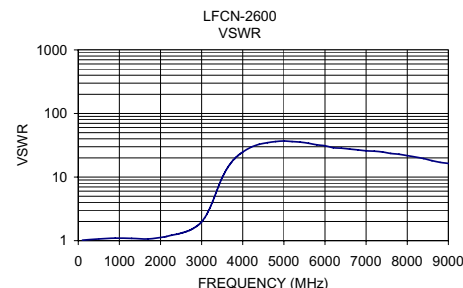
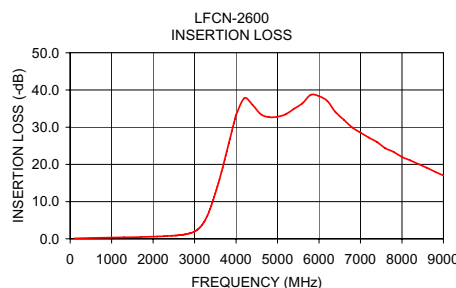


### electrical schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
100.00	0.10	1.02
1300.00	0.39	1.09
2100.00	0.61	1.15
2600.00	0.94	1.37
3000.00	1.97	1.98
3125.00	3.02	2.60
3300.00	6.03	4.66
3750.00	22.35	17.93
3900.00	28.99	22.29
4000.00	33.27	24.83
5000.00	32.82	36.97
6600.00	32.00	27.59
8000.00	22.00	21.73
8400.00	20.08	19.54
9000.00	17.02	16.41



**Mini-Circuits®**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED

minicircuits.com

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: [www.minicircuits.com](http://www.minicircuits.com)

IF/RF MICROWAVE COMPONENTS

REV. G  
M121640  
LFCN-2600  
ED-6783/5  
AD/CP/AM  
090218