NON-CATALOG

Low Pass Filter

LFCN-800

 50Ω

DC⁽¹⁾ to 800 MHz

Generic photo used for illustration purposes only

CASE STYLE: FV1206

Maximum Ratings

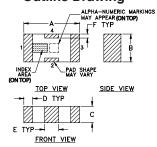
Operating Temperature	-55°C to 100°C		
Storage Temperature	-55°C to 100°C		
RF Power Input*	9W max. at 25°C		

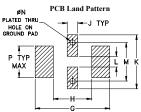
^{*} Passband rating, derate linearly to 4W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded

Pin Connections

RF IN	1_
RF OUT	3
GROUND	2,4

Outline Drawing



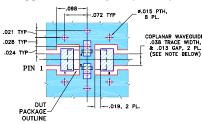


Suggested Layout, Tolerance to be within ±.002

Outline Dimensions (inch)

A .126 3.20	B .063 1.60	.037 0.94	.020 0.51	.032 0.81	F .009 0.23	G .169 4.29		
Н	J	K	L	М	N	Р	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)



COPLANAR WAYEGUIDE PARAMETERS ARE SHOWN FOR ROGERS ROA\$50B WITH THICKNESS .020" ± .0015". COPPER: 1/2 02. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED. NOTES: 1.

DENOTES DESCRIPTION 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, 9W
- small size
- 5 sections
- temperature stable
- LTCC construction

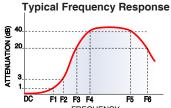
Applications

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

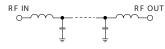
Electrical Specifications(1,2) at 25°C

Parameter		F#	Frequency (MHz)	Min.	Тур.	Max.	Unit
	Insertion Loss	DC-F1	DC-800	_	_	1.3	dB
Pass Band	Freq. Cut-Off	F2	990	_	3.0	_	dB
	VSWR	DC-F1	DC-800	_	1.2	_	:1
Stop Band		F3	1400	20	_	_	dB
	Rejection Loss	F4-F5	1500-2000	_	30	_	dB
		F6	4500	_	20	_	dB
	VSWR	F3-F6	1400-4500	_	20	_	:1

(1) In Applications where DC isolation to ground is required, coupling capacitors are recommended to avoid DC leakage. Alternatively, if DC pass IN-OUT is required, Mini-Circuits' "D" suffix version of this model will support DC IN-OUT, and provide>100 MOhm isolation to ground. (2) Measured on Mini-Circuits Characterization Test Board TB-270.

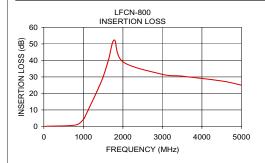


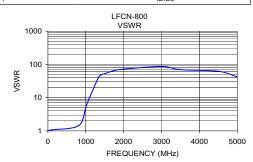




Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
10.00	0.06	1.01
100.00	0.14	1.07
800.00	0.85	1.41
990.00	3.87	4.47
1030.00	5.38	6.39
1330.00	20.50	39.49
1400.00	24.29	48.26
1500.00	30.05	52.65
1635.00	40.35	59.91
1785.00	52.35	66.82
2000.00	39.14	72.39
3000.00	31.57	86.86
3500.00	30.42	69.49
4500.00	27.52	62.05
5000.00	25.04	42.38





A. 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.

B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.

C. 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_isp