Low Pass Filter

DC to 800 MHz 50Ω

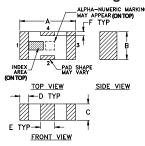
Maximum Ratings

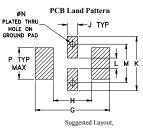
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	9W max. at 25°C
Max. DC Voltage at pins 1&3	25 VDC
DC Current Input to Output	1A max. at 25°C

Pin Connections

RF IN	1
RF OUT	3
GROUND	2,4

Outline Drawing

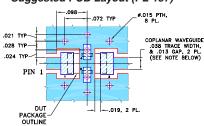




Outline Dimensions (inch)

Α	В	С	D	Е	F	G	
.126	.063	.037	.020	.032	.009	.169	
3.20	1.60	0.94	0.51	0.81	0.23	4.29	
Н	J	K	L	М	N	Р	wt
H .087	J .024	K .122	.024	M .087	N .012	P .071	wt grams

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



NOTES: 1. 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.

2. 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

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

LFCN-800D+



CASE STYLE: FV1206

+RoHS Compliant

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

Available Tape and Reel at no extra cost Reel Size Devices/Reel

20, 50, 100, 200, 500,1000, 3000

Applications

Features

• small size

5 sections

harmonic rejection

DC

• temperature stable • LTCC construction

• VHF/UHF transmitters/receivers

· excellent power handling, 9W

lab use

Electrical Specifications^{1,2} at 25°C

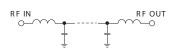
Pa	rameter	F#	Frequency (MHz)	Min.	Тур.	Max.	Unit
	Insertion Loss	DC-F1	DC-800	_	_	1.3	dB
Pass Band	Freq. Cut-Off	F2	990	_	3.0	_	dB
	VSWR	DC-F1	DC-800	_	1.2	_	:1
		F3	1400	20	_	_	dB
Oten Bend	Rejection Loss	F4-F5	1500-2000	_	30	_	dB
Stop Band		F6	4500	_	20	_	dB
	VSWR	F3-F6	1400-4500	_	20	_	:1

- (1) DC Resistance to ground is 100 Mohms min.
- (2) Measured on Mini-Circuits Characterization Test Board TB-270.

Typical Frequency Response ATTENUATION

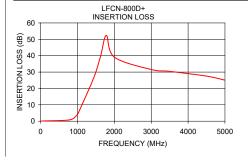
F1 F2 F3 F4

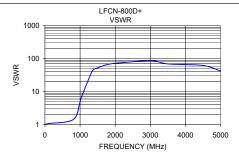
Electrical Schematic



FREQUENCY 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





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

Mouser Electronics

Authorized Distributor

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 $\frac{\text{Mini-Circuits}}{\text{\tiny LFCN-800D+}}$