Low Pass Filter

LFCN-2600+

 50Ω

DC⁽¹⁾ to 2600 MHz

Maximum Ratings

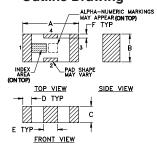
Operating Temperature	-55°C to 100°C		
Storage Temperature	-55°C to 100°C		
RF Power Input*	10W max. at 25°C		

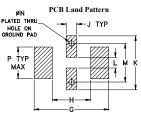
^{*} Passband rating, derate linearly to 3.5W at 100°C ambient Permanent damage may occur if any of these limits are exceeded

Pin Connections

RF IN	1
RF OUT	3
GROUND	2.4

Outline Drawing



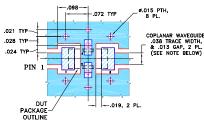


Suggested Layout, Tolerance to be within ±.002

Outline Dimensions (inch)

	.169	F .009	.032	D .020	C .037	B .063	A .126
	4.29	0.23		0.51		1.60	3.20
wt	Р	N	М	L	К	J	Н
grams	.071	.012	.087	.024	.122	.024	.087
.020	1.80	0.30	2.21	0.61	3.10	0.61	2.21

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



. COPLANAR WAYEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH THICKNESS .020" ± .0015". COPPER: 1/2 0Z. 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

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

Applications

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

Features

CASE STYLE: FV1206

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



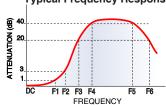
Devices/Reel 20, 50, 100, 200, 500,1000, 3000

Electrical Specifications(1,2) at 25°C

Pa	rameter	F#	Frequency (MHz)	Min.	Тур.	Max.	Unit
	Insertion Loss	DC-F1	DC-2600	_	_	1.2	dB
Pass Band	Freq. Cut-Off	F2	3125	_	3.0	_	dB
	VSWR	DC-F1	DC-2600	_	1.2	_	:1
Stop Band	Rejection Loss	F3	3750	20	_	_	dB
		F4-F5	3900-6600	_	30	_	dB
		F6	8400	_	20	_	dB
	VSWR	F3-F6	3750-8400	_	20	_	:1

(1) In Application where DC voltage is present at either input or output ports, coupling capacitors are required. 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 Frequency Response

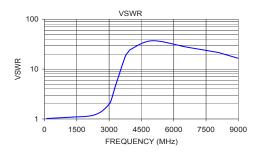




Typical Performance Data at 25°C

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	
	Frequency (MHz) 100.00 1300.00 2100.00 2600.00 3000.00 3125.00 3300.00 3750.00 3900.00 4000.00 5000.00 6600.00 8000.00 8400.00	(MHz) (dB) 100.00 0.10 1300.00 0.39 2100.00 0.61 2600.00 0.94 3000.00 1.97 3125.00 3.02 3300.00 3750.00 22.35 3900.00 22.35 3900.00 28.99 4000.00 33.27 5000.00 600.00 8000.00 8000.00 22.00 8400.00 22.00	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





Notes
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.jsp