NON-CATALOG

Low Pass Filter

LFCN-2600

 50Ω

DC⁽¹⁾ to 2600 MHz

Generic photo used for illustration purposes only

RE OUT

-0

CASE STYLE: FV1206

Maximum Ratings

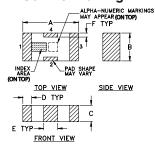
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	10W max, at 25°C

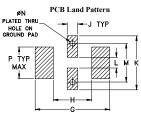
^{*} Passband rating, derate linearly to 3.5W at 100°C ambient Permanent damage may occur if any of these limits are exceeded

Pin Connections

RF IN	1_
RF OUT	3
GROUND	2.4

Outline Drawing



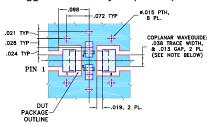


Suggested Layout, Tolerance to be within ±.002

Outline Dimensions (inch)

	G .169	F .009	.032	.020	.037	.063	A .126
wt	4.29	0.23 N	0.81 M	0.51 L	0.94 K	1.60 J	3.20 H
arams	.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 OZ. 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, 10W
- small size
- 7 sections
- temperature stable
- LTCC construction
- protected by U.S. Patent 6,943,646

Applications

- harmonic rejection
- VHF/UHF transmitters/receivers

F1 F2 F3 F4 FREQUENCY

• lab use

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ATTENUATION

Electrical Specifications(1,2) at 25°C

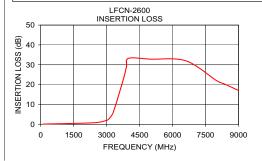
<u> </u>								
Parameter		F#	Frequency (MHz)	Min.	Тур.	Max.	Unit	
Pass Band	Insertion Loss	DC-F1	DC-2600	_	_	1.2	dB	
	Freq. Cut-Off	F2	3125	_	3.0	_	dB	
	VSWR	DC-F1	DC-2600		1.2	_	:1	
Stop Band		F3	3750	20	_	_	dB	
	Rejection Loss	F4-F5	3900-6600	_	30	_	dB	
		F6	8400	_	20	_	dB	
	VSWR	F3-F6	3750-8400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

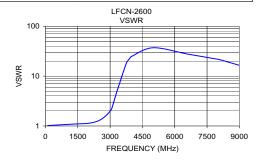
(1) In Applications where DC isolation to ground is required, coupling capacitors are recommended to avoid DC leakage. Alternatively, if DC pass IN-OUT is required, Mini-Circuits' "D" suffix version of this model will support DC IN-OUT, and provide>100 MOhm isolation to ground. (2) Measured on Mini-Circuits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

Typical 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	





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