

Ceramic Low Pass Filter

LFCN-2000

50Ω DC⁽¹⁾ to 2000 MHz



Generic photo used for illustration purposes only

CASE STYLE: FV1206



Maximum Ratings

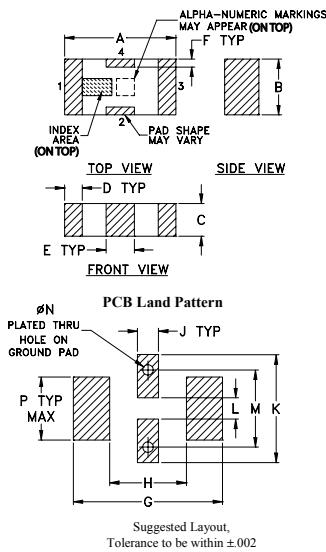
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	9W max. at 25°C

* 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

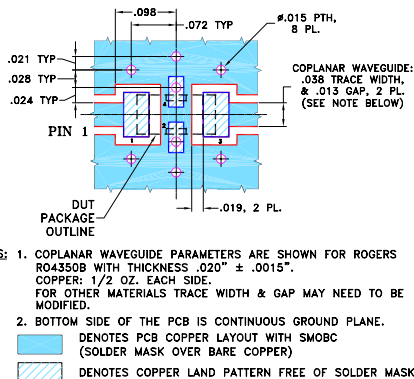


Outline Dimensions (inch)

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)



Features

- excellent power handling, 9W
- small size
- 5 sections
- temperature stable
- LTCC construction

Applications

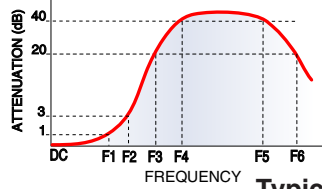
- harmonic rejection
- VHF/UHF transmitters/receivers
- lab use

Electrical Specifications^(1,2) at 25°C

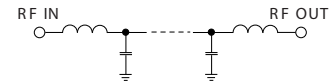
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Insertion Loss	DC-F1	DC-2000	—	—	1.5	dB
	Freq. Cut-Off	F2	2275	—	3.0	—	dB
	VSWR	DC-F1	DC-2000	—	1.3	—	:1
Stop Band	Rejection Loss	F3	3000	20	—	—	dB
		F4-F5	3100-3500	—	30	—	dB
		F6	4600	—	20	—	dB
	VSWR	F3-F6	3000-4650	—	20	—	:1

(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

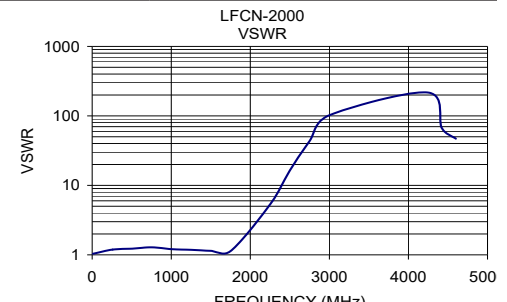
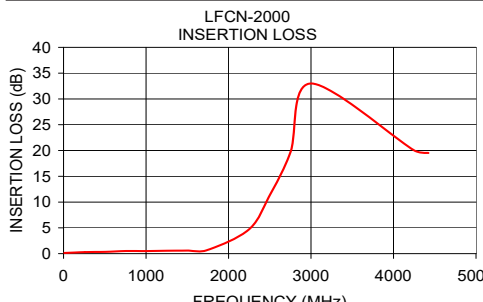


Electrical Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
10.00	0.14	1.04
258.75	0.30	1.19
507.50	0.35	1.23
756.25	0.51	1.28
1005.00	0.49	1.21
1253.75	0.56	1.18
1502.50	0.60	1.14
1751.25	0.74	1.13
2250.00	4.73	5.33
2500.00	11.34	16.41
2750.00	19.65	43.44
3000.00	32.99	102.19
4244.00	20.09	217.15
4422.00	19.52	66.82
4600.00	20.32	46.96



Notes

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