

Ceramic Low Pass Filter

50Ω DC to 120 MHz

LFCN-120+ LFCN-120



CASE STYLE: FV1206
PRICE: \$3.99 ea. QTY (10-49)

Maximum Ratings

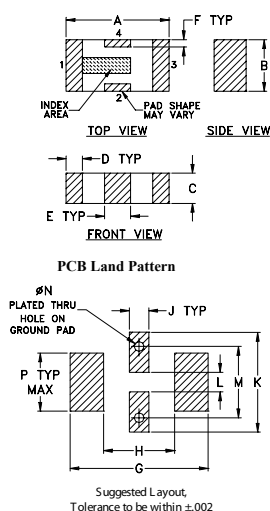
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	8.5W max. at 25°C

* 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



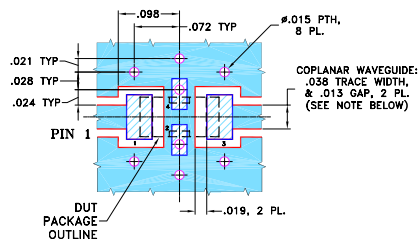
Suggested Layout, Tolerance to be within ±.002

Outline Dimensions (inch)

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, 8.5W
- small size
- 7 sections
- temperature stable
- protected by U.S. Patent 6,943,646

Applications

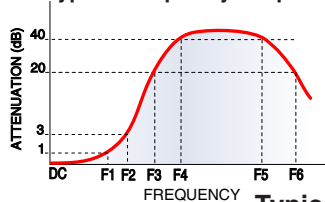
- harmonic rejection
- VHF/UHF transmitters/receivers
- RF suppression for DC lines on PCB
- anti-aliasing for A/D converter

Electrical Specifications¹ at 25°C

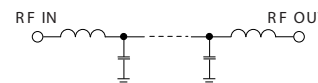
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Insertion Loss	DC-F1	DC-120	—	—	1.0	dB
	Freq. Cut-Off	F2	195	—	3.0	—	dB
	VSWR	DC-F1	DC-120	—	1.2	—	:1
Stop Band	Rejection Loss	F3	280	20	—	—	dB
		F4-F5	300-1850	—	40	—	dB
		F6	4750	—	20	—	dB
	VSWR	F3-F6	280-4750	—	20	—	:1

1. Coupling capacitors at input and output are recommended for use in applications that require DC isolation of input to output port or either port to ground.

Typical Frequency Response

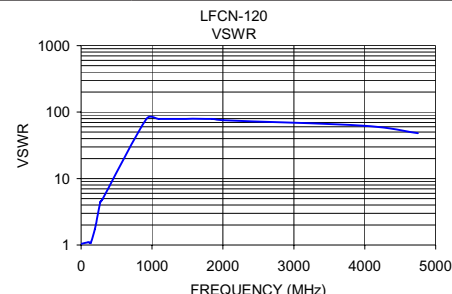
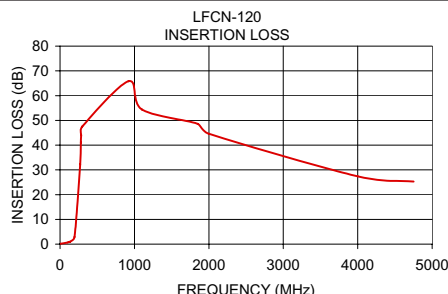


Electrical Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.00	0.13	1.04
100.00	0.68	1.10
120.00	0.83	1.08
135.00	0.96	1.08
195.00	2.89	1.73
270.00	32.22	4.45
280.00	41.07	4.55
285.00	44.02	4.61
300.00	47.56	4.86
920.00	65.79	78.97
1100.00	54.38	78.97
1850.00	48.59	78.97
2000.00	44.58	75.53
4000.00	27.36	62.05
4750.00	25.27	48.26



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Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuit's 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 overall warranty and conditions therefor, please visit Mini-Circuit's website at www.minicircuits.com/Mini-Circuits-Terms.

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