

Ceramic Low Pass Filter

DC to 105 MHz

NEW!
LFCN-105



BLUE CELL™

CASE STYLE: FV1206

Model	Price	Qty.
LFCN-105	\$3.99	(10-49)
LFCN-105D	\$4.49	(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
DC Current Input to Output	0.5A max. at 25°C

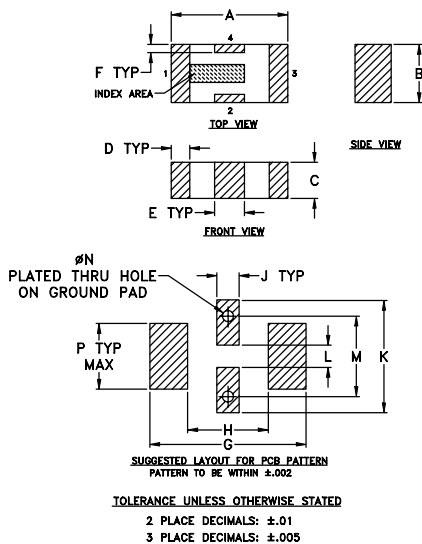
*Passband rating, derate linearly to 3.5W at 100°C ambient.

Pin Connections

RF IN	1**
RF OUT	3**
GROUND	2,4

**RF IN & RF OUT can be interchanged

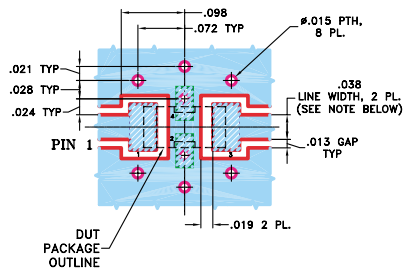
Outline Drawing



Outline Dimensions (inch)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	wt
.126	.063	.037	.020	.032	.009	.169	.087	.024	.122	.024	.087	.012	.071	grams
3.20	1.60	0.94	0.51	0.81	0.23	4.29	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
- patent pending

Applications

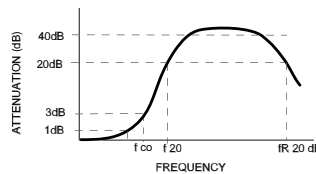
- harmonic rejection
- VHF/UHF transmitters/receivers
- RF suppression for DC lines on PCB
- anti-aliasing for A/D converter

Low Pass Filter Electrical Specifications¹ (T_{AMB}=25°C)

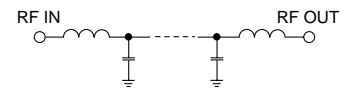
MODEL NO.	PASSBAND (MHz) (loss < 1 dB) Max.	f _{co} , MHz Nom. (loss 3 dB) Typ.	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
			f ₂₀ Min.	40 Typ.	f _{r20} Typ.	Stopband Typ.	Passband Typ.	
LFCN-105	DC-105	180	250	265-1650	4750	20	1.2	7

1. For Applications requiring DC voltage to be applied to the Input or output, use LFCN-105D (DC Resistance to ground is 100 Mohms min.)

typical frequency response



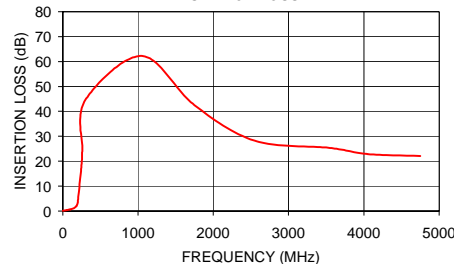
schematic



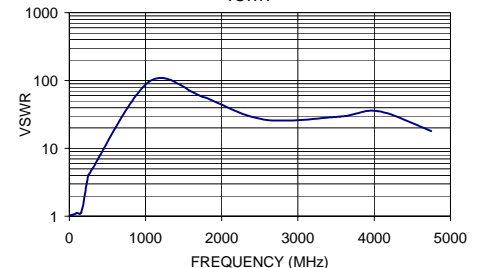
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.00	0.17	1.04
51.00	0.42	1.06
100.00	0.70	1.12
150.00	1.18	1.11
180.00	1.94	1.44
200.00	3.47	1.93
250.00	18.52	4.06
260.00	24.46	4.16
300.00	44.49	4.95
1050.00	62.21	96.51
1750.00	42.50	57.91
2550.00	28.22	26.74
3550.00	25.32	29.46
4050.00	22.87	35.46
4750.00	22.07	18.11

LFCN-105 INSERTION LOSS



LFCN-105 VSWR



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