

Low Pass Filter

LFCN-7200+

50Ω DC to 7200 MHz

Maximum Ratings

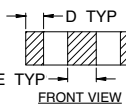
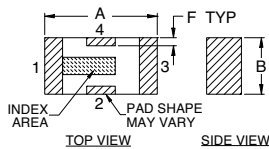
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	8W at 25°C
DC Current Input to Output	0.5A max. at 25°C

*Passband rating, derate linearly to 3 W at 100°C ambient

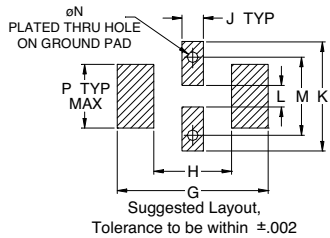
Pin Connections

RF IN	1
RF OUT	3
GROUND	2, 4

Outline Drawing



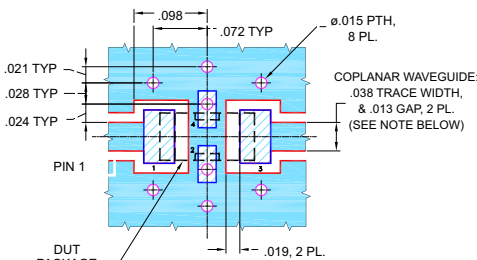
PCB Land Pattern



Outline Dimensions (inch/mm)

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
.087	.024	.122	.024	.087	.012	.071
2.21	0.61	3.10	0.61	2.21	0.30	1.80
						wt
						grams
						.020

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



NOTES:
1. COPLANAR WAVEGUIDE 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.
2. 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

Features

- excellent power handling, 8W
- small size
- 7 sections
- temperature stable
- protected by US Patent 6,943,646

Applications

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



CASE STYLE: FV1206

Model	Price	Qty.
LFCN-7200+	\$1.99	(10-49)
LFCN-7200D+	\$2.49	(10-49)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

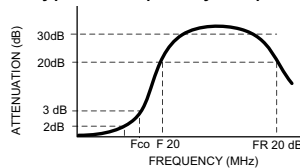
The +suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

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

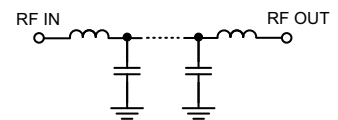
PASSBAND (MHz)	f _{co} , MHz Nom.	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
		F 20 Min.	30 Typ.	FR 20 Typ.	Stopband Typ.	Passband Typ.	
DC - 7200 (loss < 2 dB) Max.	8150 (loss 3 dB) Typ.	9500	8850 - 9600	12300	17	1.3	7

1. For Applications requiring DC voltage to be applied to the Input or output, use LFCN-7200D+ (DC Resistance to ground is 100 Mohms min.)

typical frequency response



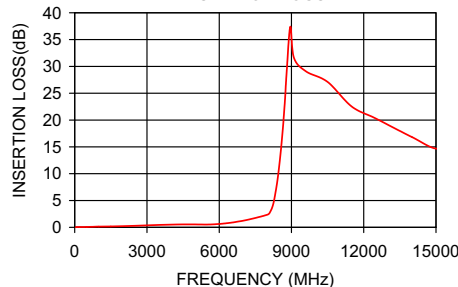
schematic



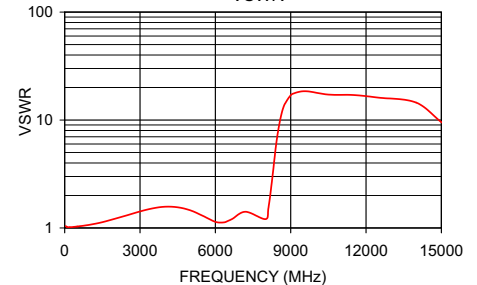
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
40	0.03	1.04
500	0.09	1.03
2000	0.24	1.22
3600	0.49	1.53
6000	0.66	1.14
7200	1.31	1.41
8000	2.00	1.21
8150	3.08	1.74
8350	7.37	4.31
8550	15.08	9.38
8730	24.45	13.49
8850	33.13	15.67
9500	31.08	17.75
9600	30.50	18.50
10500	25.86	17.22
12300	20.34	16.11
15000	14.21	9.85

LFCN-7200+ INSERTION LOSS



LFCN-7200+ VSWR



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site

The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

IF/RF MICROWAVE COMPONENTS