Ceramic

Low Pass Filter

LFCN-160+

50Ω DC to 160 MHz

Maximum Ratings

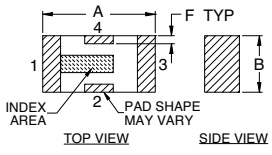
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	8W at 25°C
DC Current Input to Output	0.5A max. at 25°C

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

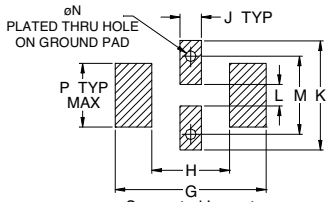
Pin Connections

RF IN	1
RF OUT	3
GROUND	2, 4

Outline Drawing



PCB Land Pattern



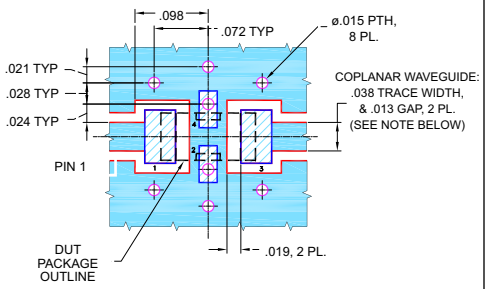
Suggested Layout,
Tolerance to be within ±.002

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	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)



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-160+	$2.99	(10-49)

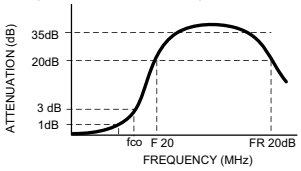
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

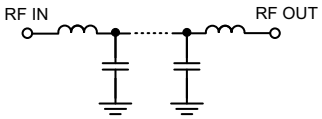
Low Pass Filter Electrical Specifications (T_{AMB}= 25°C)

PASSBAND (MHz)	fco, MHz Nom.	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
(loss < 1 dB) Max.	(loss 3 dB) Typ.	F 20 Min.	35 Typ.	FR 20 Typ.	Stopband Typ.	Passband Typ.	
DC - 160	230	330	480 - 2700	6100	17	1.2	7

typical frequency response



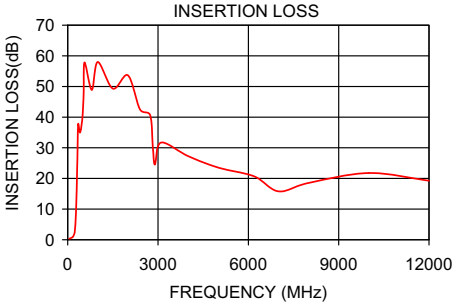
schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
40	0.29	1.07
100	0.53	1.07
150	0.77	1.09
160	0.85	1.11
210	1.60	1.41
230	2.50	1.74
260	5.92	2.80
280	10.64	3.89
310	21.67	5.22
330	30.84	5.74
350	37.58	6.13
480	39.25	12.26
1000	54.13	59.91
2700	41.64	56.04
6100	20.85	27.59
9000	33.07	14.03
12000	19.52	4.50

LFCN-160+
INSERTION LOSS



LFCN-160+
VSWR