

Ceramic

# Low Pass Filter

**NEW!**

## LFCN-2850

DC to 2850 MHz



**BLUE CELL™**

CASE STYLE: FV1206

### Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	10W max. at 25°C
DC Current Input to Output	0.5A max. at 25°C

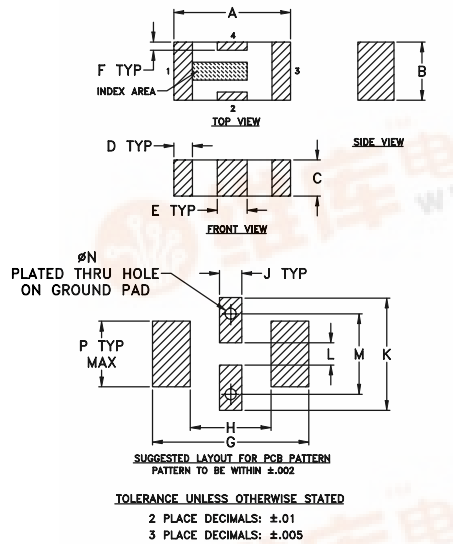
\*Passband rating, derate linearly to 3.5W at 100°C ambient.

### Pin Connections

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

\*\*RF IN & RF OUT can be interchanged

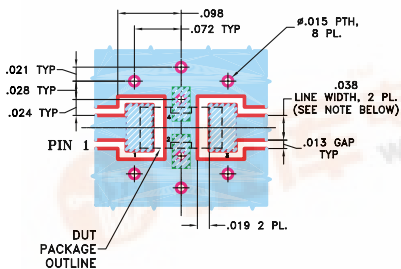
### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
.126	.063	.039	.020	.032	.009	.169	.087
3.20	1.60	0.99	0.51	0.81	0.23	4.29	2.21
J	K	L	M	N	P	wt.	
.024	.122	.024	.087	.012	.071	grams	
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, 10W
- small size
- 7 sections
- temperature stable
- patent pending

### Applications

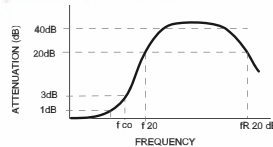
- harmonic rejection
- VHF/UHF transmitters/receivers
- lab use

### Low Pass Filter Electrical Specifications<sup>1</sup> (T<sub>AMB</sub>=25°C)

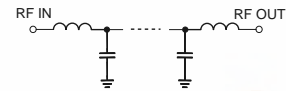
MODEL NO.	PASSBAND (MHz) (loss < 1 dB) Max.	f <sub>co</sub> , MHz Nom. (loss 3 dB) Typ.	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
			f 20 Min.	30 Typ.	fr 20 Typ.	Stopband Typ.	Passband Typ.	
LFCN-2850	DC-2850	3300	4000	4200-7400	9000	20	1.2	7

1. For Applications requiring DC voltage to be applied to the Input or output, use LFCN-2850D (DC Resistance to ground is 100 Mohms min.)

### typical frequency response

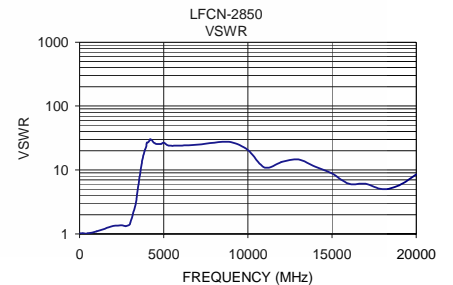
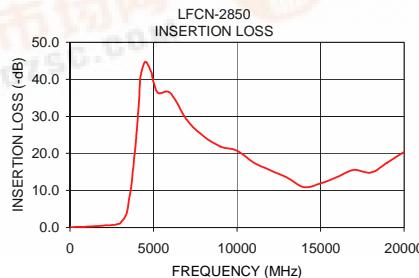


### schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50.00	0.04	1.02
1000.00	0.24	1.08
1500.00	0.36	1.20
2740.00	0.80	1.32
3320.00	3.00	2.86
3760.00	15.16	15.53
4080.00	31.03	27.16
4500.00	44.67	25.94
5000.00	39.17	26.74
7000.00	29.02	24.83
10000.00	20.75	20.45
12000.00	15.45	13.29
15000.00	11.89	8.77
18000.00	14.80	5.00
20000.00	20.40	8.51



NOTE: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350 WITH DIELECTRIC THICKNESS .020" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.  
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

① DENOTES PCB COPPER LAYOUT

② DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK



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LFCN-2850