# Ceramic Low Pass Filter

### 50Ω

## DC<sup>(1)</sup> to 630 MHz

### **Maximum Ratings**

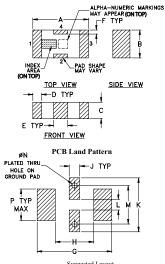
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	8.5W max. at 25°C

\* 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

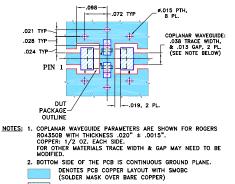


Suggested Layout, Tolerance to be within ±.002

### 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	.024	M	N	P	wt
.087	.024	.122		.087	.012	.071	grams
2.21	0.61	3.10		2.21	0.30	1.80	.020

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



DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

# Filter

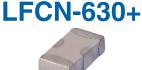
#### A Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document. B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. C. The parts covered by this specification document are subject to Mini-Circuits 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 exclusive rights and mendes thereunder, please visit Mini-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp

### Features

- excellent power handling, 8.5W
- small size
- 7 sections
- temperature stable
- LTCC construction
- protected by U.S. Patent 6,943,646

### Applications

- harmonic rejection
- VHF/UHF transmitters/receivers



Generic photo used for illustration purposes only CASE STYLE: FV1206

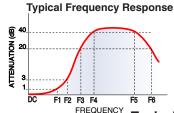
+RoHS Compliant The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

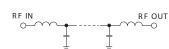


### Electrical Specifications<sup>(1,2)</sup> at 25°C

Parameter		F#	Frequency (MHz)	Min.	Тур.	Max.	Unit
	Insertion Loss	DC-F1	DC-630	_	_	1.2	dB
Pass Band	Freq. Cut-Off	F2	830	_	3.0	—	dB
	VSWR	DC-F1	DC-630	_	1.2	—	:1
		F3	1000	20	_	_	dB
Oton Donal	Rejection Loss	F4-F5	1050-3500	_	40	_	dB
Stop Band		F6	6000	_	20	—	dB
	VSWR	F3-F6	1000-6000	_	20	_	:1

(1) In Applications where DC isolation to ground is required, coupling capacitors are recommended to avoid DC leakage. Alternatively, if DC pass IN-OUT is required, Mini-Circuits' "D" suffix version of this model will support DC IN-OUT, and provide>100 MOhm isolation to ground.
(2) Measured on Mini-Circuits Characterization Test Board TB-270.

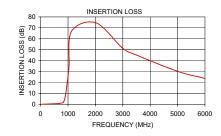


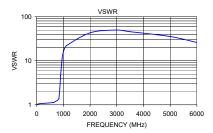


**Electrical Schematic** 

### **EQUENCY** Typical Performance Data at 25°C

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Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
1.00	0.05	1.01	
100.00	0.18	1.06	
630.00	0.75	1.13	
700.00	0.95	1.20	
830.00	2.02	1.39	
900.00	7.06	4.64	
955.00	16.49	11.38	
1000.00	25.84	15.96	
1040.00	35.54	18.50	
1130.00	66.95	22.29	
2015.00	74.70	43.44	
3000.00	51.23	49.64	
3500.00	45.12	45.72	
5000.00	30.26	35.46	
6000.00	23.74	25.94	





REV. M M173979 LFCN-630+ EDR-6588/7 RVN/AD/CP/AM 190423

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