## Low Pass Filter

DC<sup>(1)</sup> to 320 MHz 50Q

#### **Maximum Ratings**

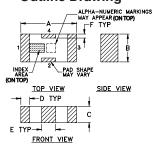
Operating Temperature	-55°C to 100°C		
Storage Temperature	-55°C to 100°C		
RF Power Input*	8.5W max. at 25°C		

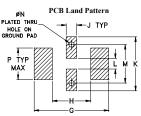
<sup>\*</sup> Passband rating, derate linearly to 3.5W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded

#### Pin Connections

RF IN	11
RF OUT	3
GROUND	2 4

#### Outline Drawing



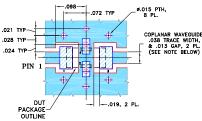


Suggested Layout, Tolerance to be within ±.002

#### Outline Dimensions (inch)

	G	F	E	D	С	В	Α
	.169	.009	.032	.020	.037	.063	.126
	4.29	0.23	0.81	0.51	0.94	1.60	3.20
wt	Р	N	M	L	K	J	Н
grams	.071	.012	.087	.024	.122	.024	.087
.020	1.80	0.30	2.21	0.61	3.10	0.61	2.21

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



. COPLANAR WAYEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH THICKNESS .020" ± .0015". COPPER: 1/2 0Z. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.

DENOTES DESCRIPTION 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

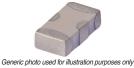
#### **Features**

- excellent power handling, 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

#### LFCN-320+



CASE STYLE: FV1206

+RoHS Compliant

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



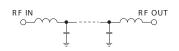
#### Electrical Specifications(1,2) at 25°C

Pa	rameter	F#	Frequency (MHz)	Min.	Тур.	Max.	Unit
	Insertion Loss	DC-F1	DC-320	_	_	1.0	dB
Pass Band	Freq. Cut-Off	F2	460	_	3.0	_	dB
	VSWR	DC-F1	DC-320	_	1.2	_	:1
		F3	560	20	_	_	dB
Sten Bend	Rejection Loss	F4-F5	640-2500	_	40	_	dB
Stop Band		F6	5300	_	20	_	dB
	VSWR	F3-F6	560-5300	_	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.

# Typical Frequency Response ATTENUATION

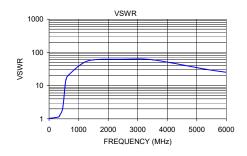
#### **Electrical Schematic**



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.00	0.09	1.02
100.00	0.30	1.06
320.00	0.78	1.14
360.00	0.99	1.26
460.00	2.60	2.03
535.00	15.40	8.90
560.00	27.43	13.29
580.00	40.10	15.53
640.00	48.87	19.98
1100.00	46.62	44.55
1500.00	48.50	59.91
2500.00	53.58	62.05
3500.00	40.54	59.91
5300.00	25.47	31.03
6000.00	24.68	25.19





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 remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms\_isp

### **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Signal Conditioning category:

Click to view products by Mini-Circuits manufacturer:

Other Similar products are found below:

MAPDCC0001 MAPDCC0004 PD0409J5050S2HF 880157 HHS-109-PIN DC1417J5005AHF AFS14A30-2185.00-T3 AFS14A35-1591.50-T3 DS-323-PIN B39321R801H210 1A0220-3 JP510S LFB212G45SG8C341 LFB322G45SN1A504 LFL182G45TC3B746 SF2159E 30057 FM-104-PIN CER0813B MAPDCC0005 3A325 40287 41180 ATB3225-75032NCT BD0810N50100AHF BD2425J50200AHF C5060J5003AHF JHS-115-PIN JP503AS DC0710J5005AHF DC2327J5005AHF DC3338J5005AHF 43020 LFB2H2G60BB1C106 LFL15869MTC1B787 X3C19F1-20S XC3500P-20S 10013-20 SF2194E CDBLB455KCAX39-B0 TGL2208-SM, EVAL RF1353C PD0922J5050D2HF 1E1305-3 1G1304-30 B0922J7575AHF 2020-6622-20 TP-102-PIN TP-103-PIN BD1222J50200AHF