



Mini-Circuits

CERAMIC

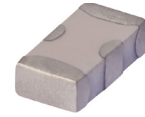
Low Pass Filter

LFCN-2600AT+

50Ω DC¹ to 2600 MHz

FEATURES

- Excellent power handling, 10 W
- Small size
- 7 sections
- Temperature stable
- LTCC construction
- Protected by U.S. Patent 6,943,646
- AEC-Q200 qualified component family



Generic photo used for illustration purposes only

CASE STYLE: FV1206

+RoHS CompliantThe +Suffix identifies RoHS Compliance.
See our website for methodologies and qualifications

APPLICATIONS

- Automotive

ELECTRICAL SPECIFICATIONS^{1,2} AT +25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Units
Passband	Insertion Loss	DC-F1	DC-2600	—	—	1.2	dB
	Freq. Cut-Off	F2	3125	—	3.0	—	dB
	VSWR	DC-F1	DC-2600	—	1.2	—	:1
Stop Band	Rejection Loss	F3	3750	20	—	—	dB
		F4-F5	3900-6600	—	30	—	
		F6	8400	—	20	—	
	VSWR	F3-F6	3750-8400	—	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.

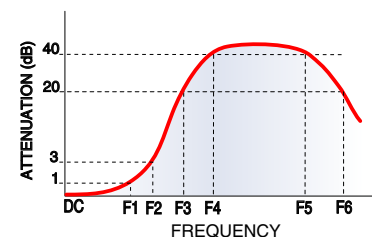
2. Electrical performance measured on TB-270 using LFCN-2600+

ABSOLUTE MAXIMUM RATINGS

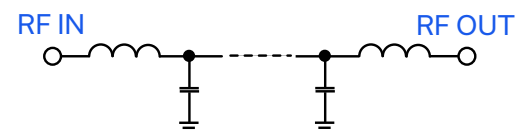
Parameter	Ratings
Operating Temperature	-40 to +105 °C
Storage Temperature	-40 to +105 °C
RF Power Input ³	10 W max. at +25°C

3. Passband rating, derate linearly to 3.5W at +105°C ambient.
Permanent damage may occur if any of these limits are exceeded.

TYPICAL FREQUENCY RESPONSE



FUNCTIONAL SCHEMATIC



Mini-Circuits

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 REV. OR
 NPO-005311
 LFCN-2600AT+
 MCL NY
 250603

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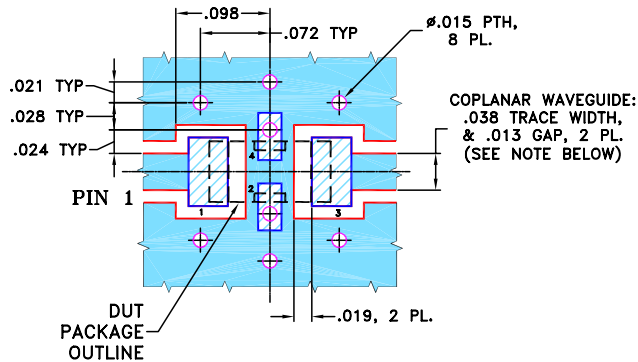
LFCN-2600AT+

PIN CONNECTIONS

RF IN	1
RF OUT	3
GROUND	2,4

PRODUCT MARKING: B6

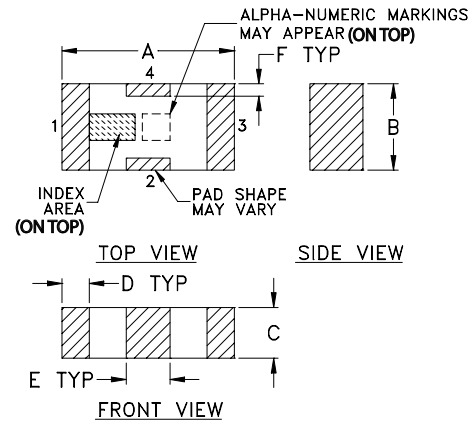
DEMO BOARD MCL P/N: TB-270
SUGGESTED PCB LAYOUT (PL-137)



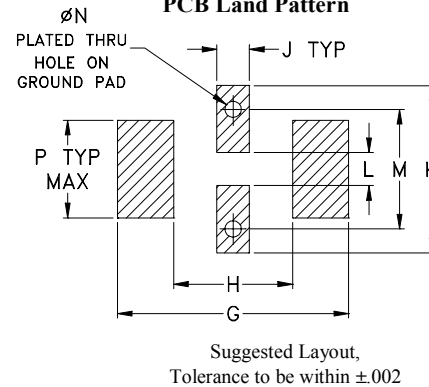
NOTES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH THICKNESS .020" ± .0015".
COPPER: 1/2 OZ. EACH SIDE.
FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.

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

OUTLINE DRAWING



PCB Land Pattern



OUTLINE DIMENSIONS (Inches 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

TAPE & REEL INFORMATION: F71



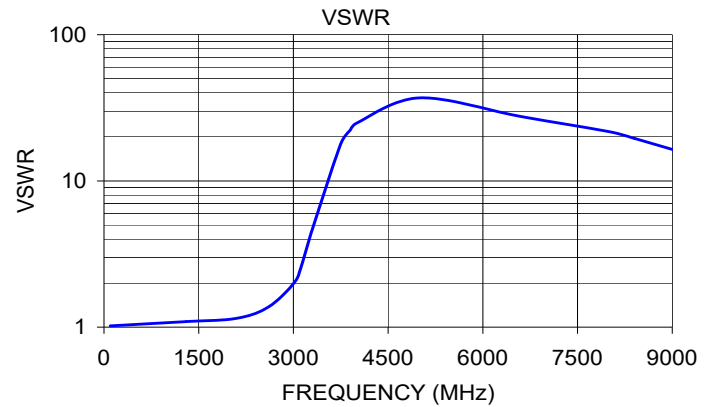
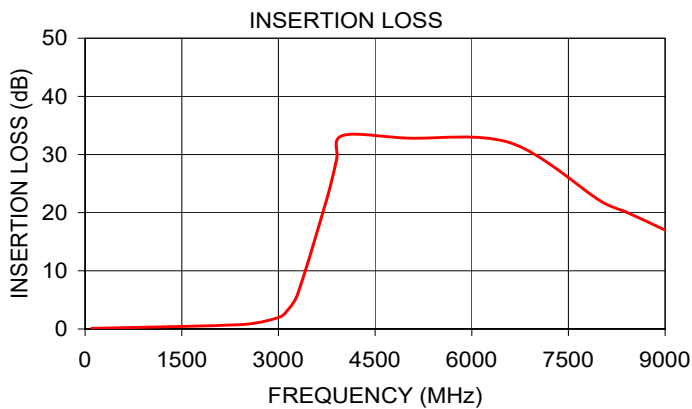
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TYPICAL PERFORMANCE DATA AT +25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
100.00	0.10	1.02
1300.00	0.39	1.09
2100.00	0.61	1.15
2600.00	0.94	1.37
3000.00	1.97	1.98
3125.00	3.02	2.60
3300.00	6.03	4.66
3750.00	22.35	17.93
3900.00	28.99	22.29
4000.00	33.27	24.83
5000.00	32.82	36.97
6600.00	32.00	27.59
8000.00	22.00	21.73
8400.00	20.08	19.54
9000.00	17.02	16.41



NOTES

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- 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.jsp

