High Pass Filter

HFCN-880

50Ω

950 to 3200 MHz

CASE STYLE: FV1206

Maximum Ratings

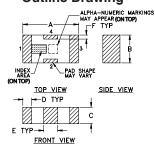
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	7W max at 25°C

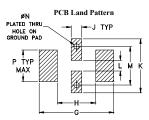
^{*} Passband rating, derate linearly to 3W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded

Pin Connections

RF IN	1_
RF OUT	3
GROUND	2,4

Outline Drawing



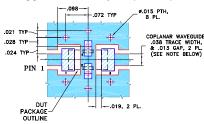


Suggested Layout, Tolerance to be within ±.002

Outline Dimensions (inch)

	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.

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

- low cost
- small size
- 7 sections
- temperature stable
- hermetically sealed
- LTCC construction
- excellent power handling, 7W

Applications

- sub-harmonic rejection
- transmitters/receivers
- lab use

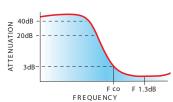
Electrical Specifications(1,2) at 25°C

,	BAND Hz) in.	fco, MHz Nom.	PASSBAND VSWR (:1) (MHz) Typ.		p.`´	POWER INPUT (W)	NO. OF SECTIONS	
		(loss 3 dB)	(loss < 1.3 dB)	(loss < 2 dB)		Frequency (MHz)		
(loss > 40 dB)	(loss > 20 dB)	Тур.	Max.	Тур.	Stopband	1.5:1		
500	640	880	1060-2500	950-3200	20:1	970-2400	7	7

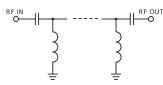
(1) In Application where DC voltage is present at either input or output ports, coupling capacitors are required. Alternatively, Mini-Circuits' "D" suffix version of this model will provide>100 MOhm isolation to ground.

(2) Measured on Mini-Circuits Characterization Test Board TB-270.

typical frequency response



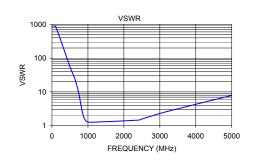
electrical schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.00	82.28	868.59
100.00	78.78	868.59
500.00	45.84	56.04
640.00	23.68	24.14
750.00	10.22	8.68
810.00	4.85	3.84
880.00	1.97	1.83
950.00	1.17	1.36
970.00	1.06	1.32
1060.00	0.83	1.26
2400.00	0.52	1.46
2500.00	0.60	1.58
3200.00	1.42	2.62
5000.00	5.12	7.87





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.jsp