

Plug-In Bandpass Filter

PIF-21.4+

50Ω Constant Impedance 18 to 25 MHz

Maximum Ratings

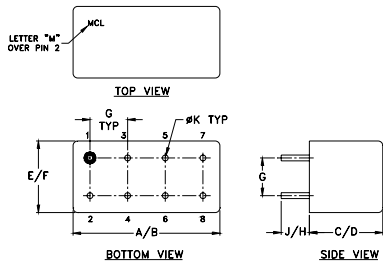
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

Permanent damage may occur if any of these limits are exceeded.

Pin Connections

INPUT	1
OUTPUT	6
GROUND	2,3,4,5,7,8
CASE GROUND	2,5,7,8

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K		wt
.200	.20	.14	.031		grams
5.08	5.08	3.56	0.79		5.2



Features

- low VSWR in pass & stopbands, 1.3:1 typ.
- shielded welded case, hermetically sealed
- custom designs available

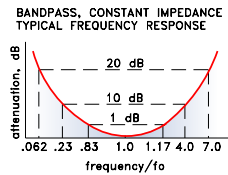
Applications

- harmonic rejection
- lab use
- military/hi-rel applications

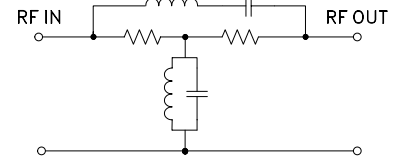
Bandpass Filter Electrical Specifications

MODEL NO.	CENTER FREQ. (MHz)	PASSBAND (MHz) (loss < 1 dB)	STOPBANDS		VSWR, 1.3:1 Typ. TOTAL BAND (MHz)
			(loss > 10 dB) at MHz	(loss > 20 dB) at MHz	
PIF-21.4+	21.4	18-25	4.9 & 85	1.3 & 150	DC-220

typical frequency response

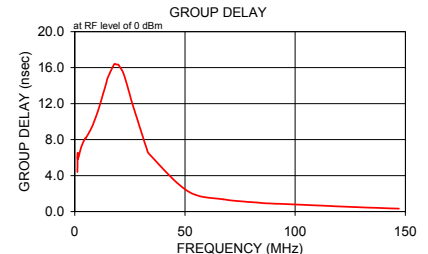
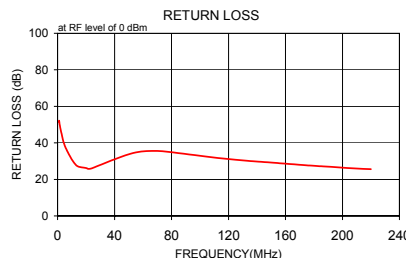


electrical schematic



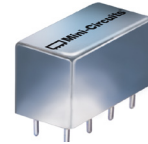
Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	\bar{x}	σ			
1.00	25.27	0.20	52.20	1.20	4.399
1.10	24.91	0.20	51.60	1.30	6.493
1.10	24.55	0.20	51.70	1.40	5.803
1.20	24.24	0.20	51.40	2.60	6.877
1.20	23.93	0.20	51.20	3.70	7.658
1.30	23.64	0.20	50.90	4.90	8.204
1.40	23.17	0.20	50.10	5.00	8.142
3.70	15.71	0.10	41.80	7.90	9.473
4.90	13.27	0.10	39.00	11.00	11.528
6.00	11.38	0.10	36.80	14.00	14.015
8.70	7.85	0.10	32.80	15.00	14.909
11.30	5.18	0.10	29.50	17.90	16.385
14.00	2.92	0.10	27.20	18.80	16.348
18.00	0.72	0.10	26.50	19.80	16.309
20.30	0.14	0.10	26.20	20.90	15.915
21.50	0.01	0.10	25.80	21.60	15.629
23.80	0.05	0.10	26.00	22.40	15.139
40.00	2.02	0.20	31.00	23.20	14.502
55.00	7.93	0.20	34.80	24.00	13.843
70.00	10.88	0.20	35.60	24.80	13.162
85.00	13.23	0.20	34.40	26.20	11.927
100.00	15.41	0.20	32.90	32.70	6.934
116.70	17.64	0.20	31.40	33.90	6.349
133.30	19.87	0.10	30.20	51.30	2.263
150.00	22.27	0.10	29.20	67.60	1.347
175.00	26.56	0.20	27.70	84.60	0.959
186.30	28.96	0.20	27.10	86.10	0.936
197.50	31.82	0.30	26.60	107.80	0.693
208.80	35.24	0.60	26.00	128.10	0.484
220.00	38.08	1.40	25.60	147.10	0.321



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-Circuit's 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-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp



CASE STYLE: A01

+RoHS Compliant

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