Plug-In

Bandpass Filter

PIF-21.4+

50Ω Constant Impedance 18 to 25 MHz

Generic photo used for illustration purposes only

CASE STYLE: A01

+RoHS Compliant

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

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

Features

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

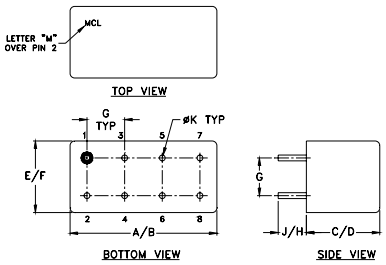
Applications

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

Bandpass Filter Electrical Specifications

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

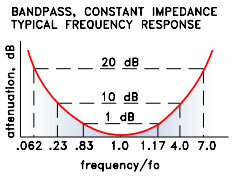
Outline Drawing



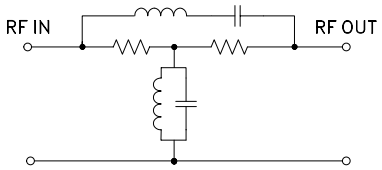
Outline Dimensions (inch / mm)

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

typical frequency response



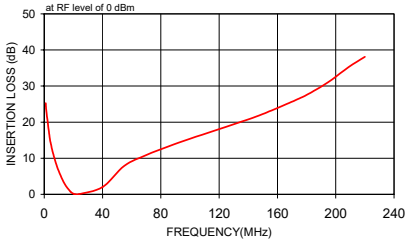
electrical schematic



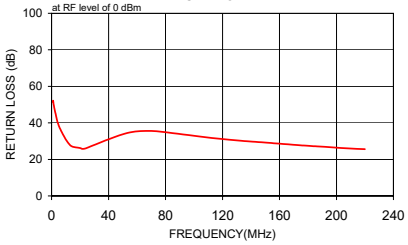
Typical Performance Data

Frequency (MHz)	Insertion Loss (dB) x̄	Insertion Loss (dB) σ	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
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

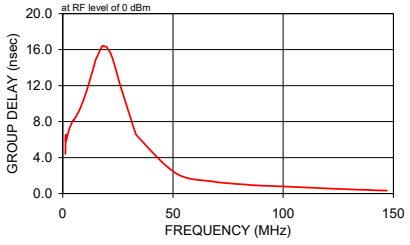
INSERTION LOSS



RETURN LOSS



GROUP DELAY



Notes

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.
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