

Bandpass Filter

PIF-40+

50Ω Constant Impedance 35 to 49 MHz

Maximum Ratings

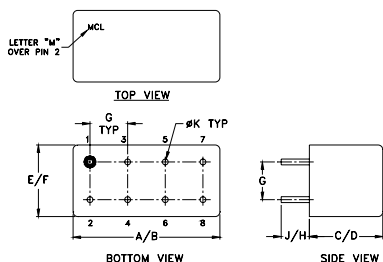
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

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



Generic photo used for illustration purposes only

CASE STYLE: A01

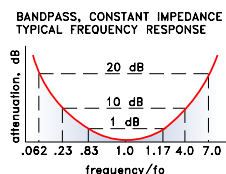
+RoHS Compliant

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

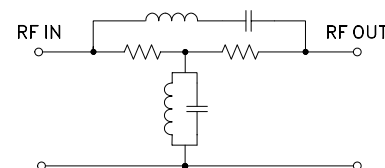
Bandpass Filter Electrical Specifications

MODEL NO.	CENTER FREQ. (MHz)	PASSBAND (MHz)	STOPBANDS	VSWR, 1.3:1 Typ. TOTAL BAND (MHz)
		(loss < 1 dB)	(loss > 10 dB) at MHz (loss > 20 dB) at MHz	
PIF-40+	42	35-49	10 & 168 2.6 & 300	DC-400

typical frequency response

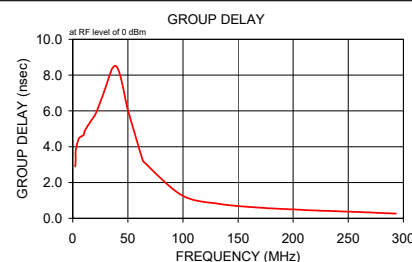
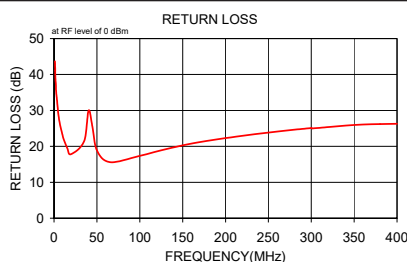


electrical schematic



Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
$\bar{x}$	σ			
1.0	31.97	0.1	2.3	2.895
1.3	29.62	0.1	2.6	3.319
1.6	27.72	0.1	2.7	3.755
2.0	26.20	0.1	5.2	4.422
2.3	24.90	0.1	7.5	4.574
2.6	23.77	0.1	9.9	4.649
3.0	22.54	0.1	11.0	4.904
5.3	17.56	0.1	16.1	5.402
7.7	14.41	0.1	20.9	5.852
10.0	12.05	0.1	26.2	6.700
11.0	11.21	0.1	27.1	6.840
15.3	8.20	0.1	35.1	8.288
19.7	5.92	0.1	36.3	8.399
35.0	0.86	0.1	37.6	8.498
40.3	0.23	0.1	39.6	8.488
44.7	0.31	0.1	41.7	8.249
50.0	0.88	0.1	43.2	7.937
65.0	3.17	0.1	45.4	7.393
99.3	7.37	0.2	47.0	6.910
133.7	10.43	0.2	48.7	6.395
168.0	12.93	0.3	50.4	5.956
212.0	15.76	0.3	63.1	3.323
256.0	18.46	0.4	64.2	3.167
300.0	21.25	0.5	98.9	1.296
301.0	21.32	0.5	132.6	0.812
320.8	22.67	0.6	168.9	0.599
340.60	24.13	0.7	207.7	0.474
360.40	25.67	0.9	211.3	0.462
380.20	27.40	1.1	255.6	0.363
400.00	29.24	1.4	293.4	0.264



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

