

Bandpass Filter

PIF-50+

50Ω Constant Impedance 41 to 58 MHz

Maximum Ratings

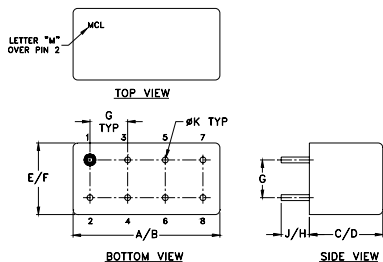
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

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)

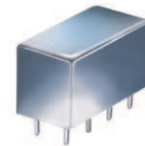
A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	

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



CASE STYLE: A01

PRICE: \$17.20 ea. QTY: 1-9

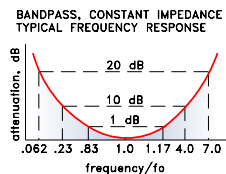
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

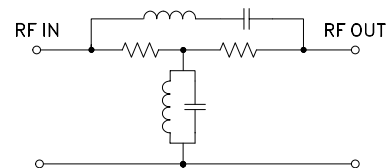
Bandpass Filter Electrical Specifications

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-50+	50	41-58	11.5 & 200 3.1 & 350	DC-440

typical frequency response

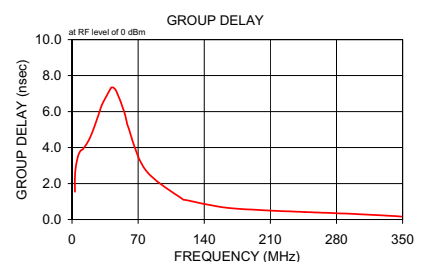
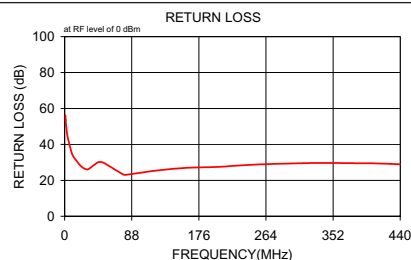


electrical schematic



Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
$\bar{x}$	σ			
1.0	33.62	0.2	3.1	1.540
1.4	30.60	0.2	3.2	2.572
1.8	28.39	0.2	5.9	3.434
2.3	26.60	0.2	8.7	3.800
2.7	25.16	0.2	11.4	3.893
3.1	23.91	0.2	11.6	3.910
4.0	21.72	0.3	18.2	4.448
9.0	14.63	0.2	24.4	5.257
11.5	12.44	0.2	31.1	6.290
20.0	7.25	0.2	32.2	6.428
23.7	5.61	0.2	41.0	7.293
27.3	4.18	0.2	41.7	7.342
31.0	2.95	0.2	43.9	7.325
41.0	0.70	0.1	46.2	7.197
45.5	0.28	0.1	48.7	6.905
50.0	0.21	0.1	51.3	6.571
53.0	0.34	0.1	53.1	6.309
77.0	3.12	0.1	55.9	5.874
80.0	3.52	0.1	57.9	5.441
120.0	7.84	0.1	58.9	5.242
160.0	10.99	0.2	77.6	2.769
200.0	13.61	0.2	117.5	1.114
250.0	16.51	0.2	119.5	1.093
316.7	20.38	0.4	160.3	0.679
350.0	22.46	0.4	200.7	0.525
390.0	25.29	0.6	246.9	0.414
402.5	26.25	0.7	251.2	0.408
415.0	27.29	0.8	298.5	0.306
427.5	28.35	0.9	342.8	0.185
440.0	29.49	1.0	348.7	0.163



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ISO 9001 ISO 14001 AS 9100 CERTIFIED

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IF/RF MICROWAVE COMPONENTS

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Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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.

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