

High Pass Filter

RHP-305+

50Ω 420 to 3200 MHz

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W at 25°C

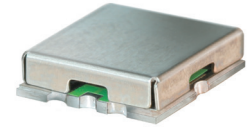
Permanent damage may occur if any of these limits are exceeded.

Pin Connections

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

Features

- low insertion loss, 0.4dB typ. @ passband
- high rejection
- shielded case
- aqueous washable



CASE STYLE: GP731

+RoHS Compliant

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

Available Tape and Reel at no extra cost	
Reel Size	Devices/Reel
7"	10, 20, 50, 100, 200
13"	500, 1000

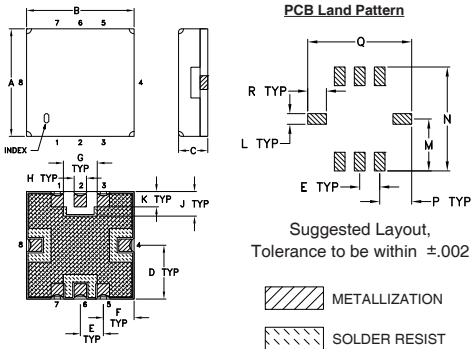
Applications

- transmitters / receivers
- sub-harmonic rejection
- military communications

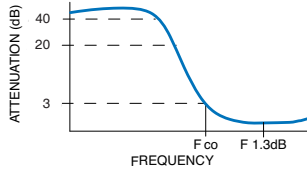
High Pass Filter Electrical Specifications (T_{AMB} = 25°C)

STOPBAND (MHz)		f _{co} , MHz Nom.	PASSBAND (MHz)	VSWR (:1)	
(Loss > 40dB)	(Loss > 20dB)	(Loss 3dB)	(Loss < 1dB)	Stopband Typ.	Passband Typ.
DC - 160	DC - 215	305	420 - 3200	18	1.2

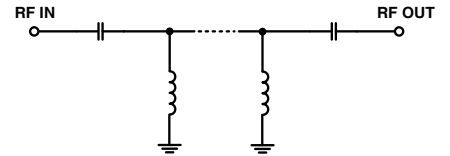
Outline Drawing



Typical Frequency Response



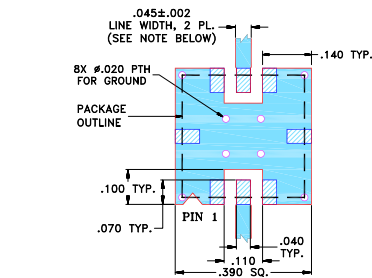
Functional Schematic



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J
.350	.350	.100	.175	.075	.100	.110	.040	.080
8.89	8.89	2.54	4.45	1.93	2.54	2.79	1.02	2.03
K	L	M	N	P	Q	R	wt.	
.050	.040	.195	.390	.120	.390	.070	grams	
1.27	1.02	4.95	9.91	3.05	9.91	1.78	0.25	

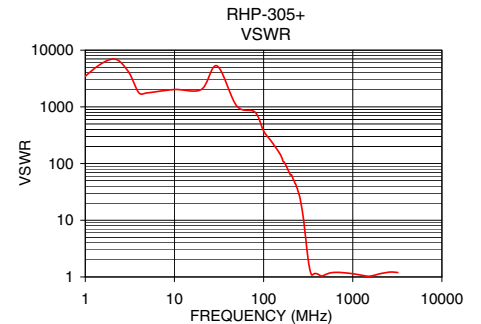
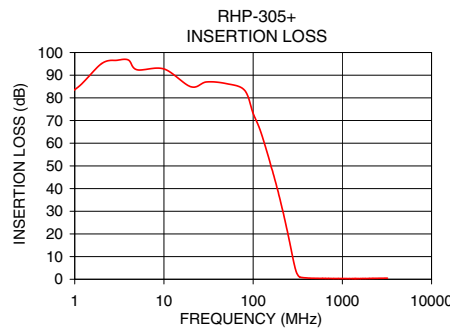
Demo Board MCL P/N: TB-332 Suggested PCB Layout (PL-176)



- NOTES:**
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .025" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 2. 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

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.0	83.65	3465.64
20.0	84.93	2026.91
50.0	86.29	1038.38
100.0	73.12	374.58
120.0	65.69	256.53
160.0	49.30	127.03
215.0	30.10	53.00
260.0	15.22	21.85
285.0	7.59	8.38
300.0	4.04	4.06
305.0	3.17	3.21
320.0	1.57	1.78
350.0	0.78	1.08
420.0	0.53	1.09
700.0	0.36	1.21
1000.0	0.32	1.14
2000.0	0.37	1.13
3200.0	0.50	1.20



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.
- 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

