

# High Pass Filter

## RHP-110+

50Ω 185 to 2500 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, 0.3dB typ. @ passband
- high rejection
- shielded case
- aqueous washable

### Applications

- transmitters / receivers
- sub-harmonic rejection



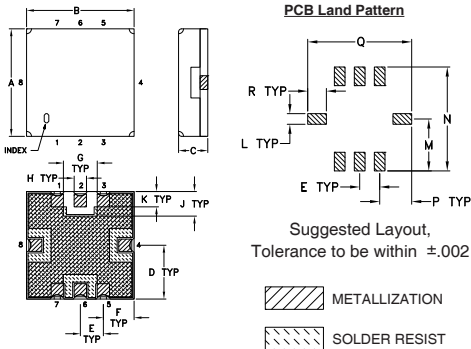
Generic photo used for illustration purposes only  
CASE STYLE: GP731

**+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

### Outline Drawing

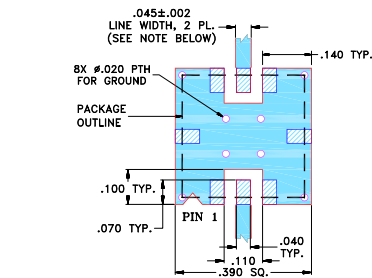


### Outline Dimensions (inch/mm)

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	1.91	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	

Note: Please refer to case style drawing for details

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

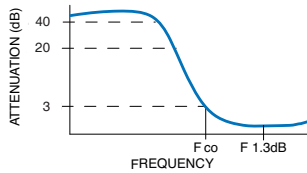


- NOTES:**
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .025" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
  2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
  - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

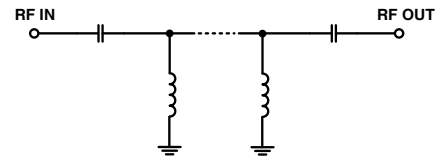
### High Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

STOPBAND (MHz)	f <sub>co</sub> , MHz Nom.	PASSBAND (MHz)	VSWR (:1)
(Loss > 40dB)	(Loss > 20dB)	(Loss < 3dB)	Stopband Typ. Passband Typ.
DC - 60	DC - 75	110	18 1.2

### Typical Frequency Response

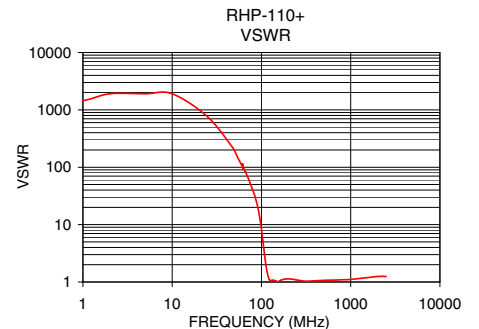
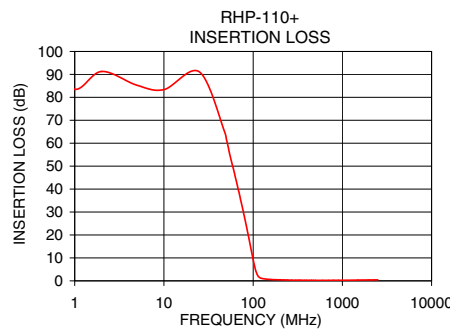


### Functional Schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.0	83.49	1457.50
25.0	91.10	757.04
60.0	48.89	108.79
75.0	32.71	51.99
90.0	18.12	21.94
100.0	9.19	8.47
105.0	5.56	4.56
110.0	3.08	2.51
115.0	1.82	1.59
125.0	1.06	1.06
140.0	0.77	1.07
185.0	0.48	1.13
300.0	0.28	1.03
500.0	0.22	1.07
1000.0	0.23	1.11
1500.0	0.33	1.19
2000.0	0.39	1.24
2500.0	0.42	1.25



**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-Circuits' applicable established test performance criteria and measurement instructions.
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