

High Pass Filter

RHP-180+

50Ω 300 to 3000 MHz

Maximum Ratings

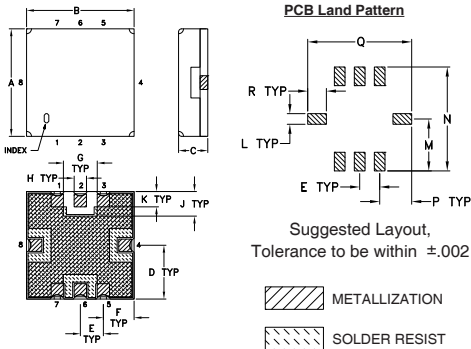
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W at 25°C

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

Pin Connections

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

Outline Drawing

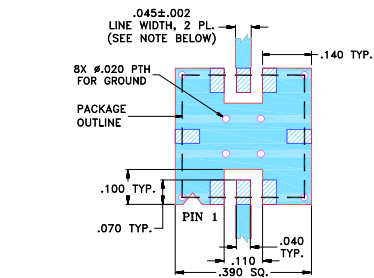


Outline Dimensions (inch/mm)

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		

Note: Please refer to case style drawing for details

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



- NOTES:**
- 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.
 - 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

Features

- low insertion loss, 0.5dB typ. @ passband
- high rejection
- shielded case
- aqueous washable

Applications

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



Generic photo used for illustration purposes only
CASE STYLE: GP731

+RoHS Compliant

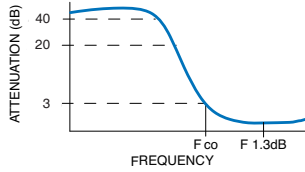
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

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

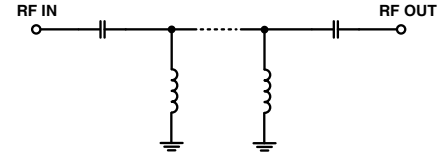
High Pass Filter Electrical Specifications (T_{AMB} = 25°C)

STOPBAND (MHz)	f _{co} , MHz Nom.	PASSBAND (MHz)	VSWR (:1)
(Loss > 40dB)	(Loss > 20dB)	(Loss < 3dB)	Stopband Typ. Passband Typ.
DC - 100	DC - 135	180	18 1.2

Typical Frequency Response

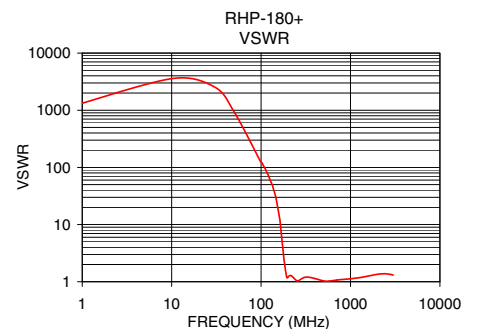
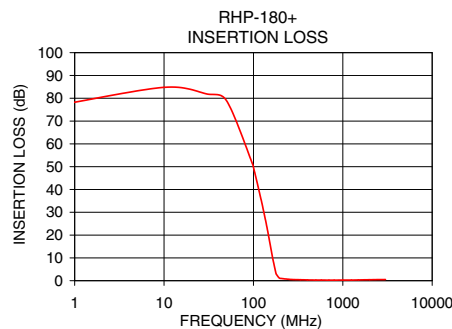


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.0	76.59	1100.71
10.0	84.80	3575.04
30.0	81.89	2557.85
50.0	78.94	937.93
98.5	50.86	126.88
100.0	49.70	124.82
103.0	47.72	117.88
122.0	35.47	69.19
135.0	27.44	46.38
146.0	20.76	30.22
180.0	2.90	2.49
216.0	0.88	1.28
300.0	0.47	1.18
500.0	0.28	1.03
1000.0	0.26	1.12
1500.0	0.34	1.24
2000.0	0.43	1.35
3000.0	0.50	1.31



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