Metal Shield

Bandpass Filter

RBP-440+

50Ω 410 to 470 MHz

Maximum Ratings

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

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

Pin Connections

RF IN	2
RF OUT	6
GROUND	1,3,4,5,7,8

Features

- linear phase, up to ±3deg typ. @ Fc ±30MHz
- good VSWR,1.3:1 typ. @ passband
- small size 0.35" x 0.35"
- shielded case
- aqueous washable

Applications

- harmonic rejection
- transmitters / receivers
- personal & home communication

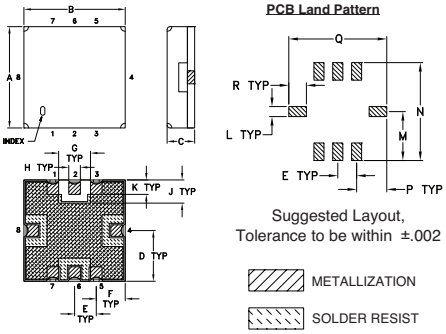
CASE STYLE: GP731
PRICE: $13.70 ea. QTY (10)

+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

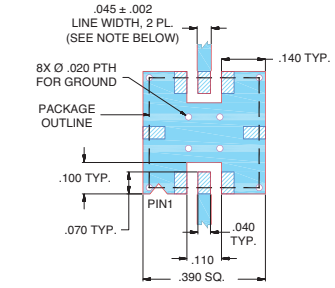
Outline Drawing



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	1.93	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)



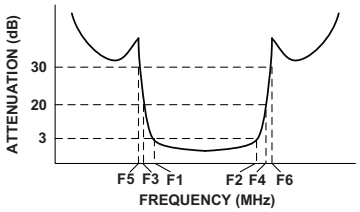
NOTES:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .025" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

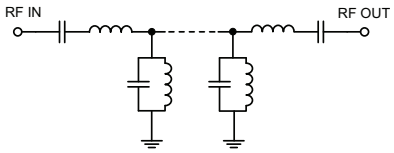
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz)	STOPBANDS (MHz)				MAXIMUM DEVIATION FROM LINEAR PHASE (deg.)	VSWR (:1)		
	(Loss < 3dB)	Loss > 20dB		Loss > 30dB			Passband		Stopband
Fc	F1 - F2	F3	F4	F5	F6	Fc ± 30MHz	Typ.	Max.	Typ.
440	410 - 470	320	650	200	850 - 1500	±6	1.3	2.0	20

Typical Frequency Response



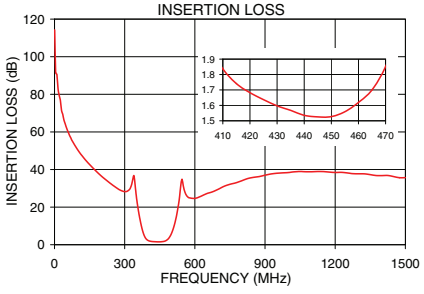
Functional Schematic



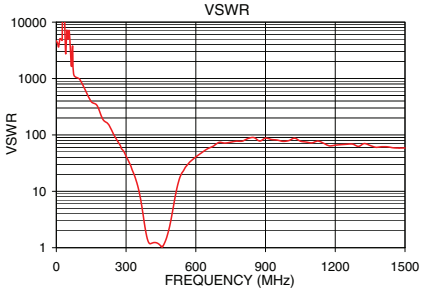
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Deviation from Linear Phase (deg)
0.5	101.96	4669.18	410.0	2.69
50.0	62.44	4976.10	413.0	1.43
150.0	42.32	390.29	416.0	0.56
320.0	30.36	28.41	420.5	-0.37
355.0	18.05	10.40	425.0	-0.84
370.0	8.73	4.79	428.0	-0.96
380.0	4.74	2.55	434.0	-0.86
395.0	2.23	1.30	437.0	-0.73
410.0	1.67	1.20	438.5	-0.62
440.0	1.43	1.17	440.0	-0.53
470.0	1.79	1.34	441.5	-0.42
490.0	3.67	2.66	443.0	-0.30
500.0	5.97	4.37	446.0	-0.07
510.0	9.60	7.47	452.0	0.34
530.0	21.82	16.89	455.0	0.49
650.0	26.91	56.67	463.0	0.45
850.0	35.76	89.73	466.5	0.19
1500.0	36.15	58.75	470.0	-0.24

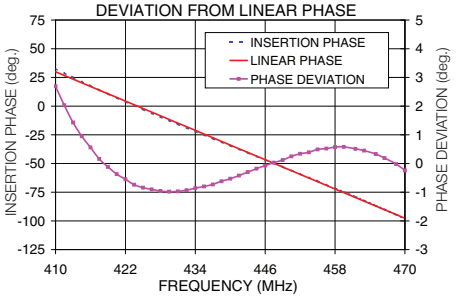
RBP-440+
INSERTION LOSS



RBP-440+
VSWR



RBP-440+
INSERTION PHASE &
DEVIATION FROM LINEAR PHASE



For detailed performance specs & shopping online see web site

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