

Features

- linear phase, up to $\pm 7^\circ$ typ. @ $F_c \pm 45\text{MHz}$
- good VSWR, 1.2:1 typ. @ passband
- small size 8.89" x 8.89"
- shielded case
- aqueous washable

Applications

- harmonic rejection
- transmitters / receivers
- navigation

HT-RBP-415+



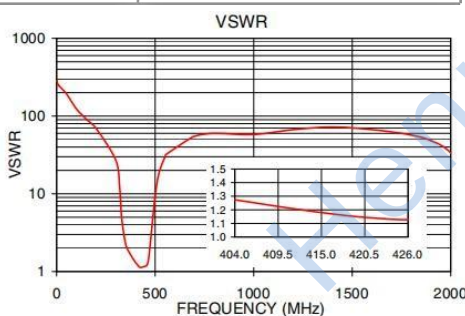
50Ω 404 to 426 MHz

Bandpass Filter Electrical Specifications ($T_{AMB} = 25^\circ\text{C}$)

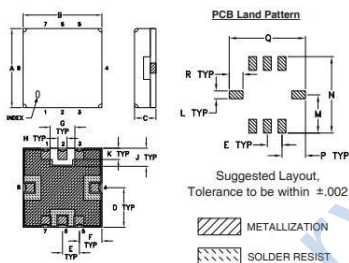
CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 4dB)	STOPBAND (MHz)				VSWR		
		(Loss > 20dB)		(Loss > 35dB)		Passband		Stopband
F_c	$F_1 - F_2$	F_3	F_4	F_5	F_6	Typ.	Max.	Typ.
415	404-426	225	550	120	750-2000	1.5	1.7	18

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
0.3	99.29	289.53
50	61.00	193.02
120	45.73	108.58
225	31.41	59.91
318	15.95	13.81
328	7.41	5.85
340	3.23	2.65
404	1.26	1.27
425	1.28	1.13
426	1.28	1.13
475	3.35	2.24
490	7.48	5.59
510	15.50	13.92
550	32.64	29.96
750	49.35	53.46
900	66.98	57.91
2000	47.47	33.42



Outline Drawing



Outline Dimensions: Unit (mm)

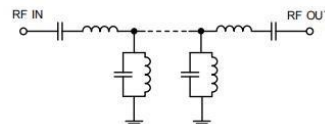
A	8.89	B	8.89	C	2.54
D	4.45	E	1.91	F	2.54
G	2.79	H	1.02	J	2.03
K	1.27	L	1.02	M	4.95
N	9.91	P	3.05	Q	9.91
R	1.78	wt	0.25		

Maximum Ratings

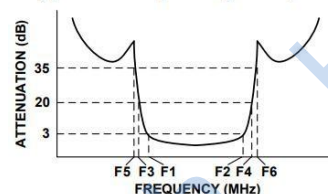
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.5 W at 25°C

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

Functional Schematic



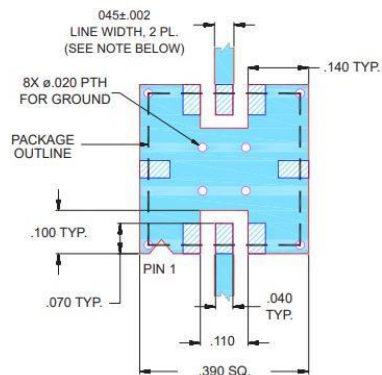
Typical Frequency Response



Pad Connections

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

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