

Bandpass Filter

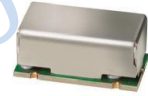
Features

- Linear Phase, up to ± 2 deg Typ @ $F_c \pm 15$ MHz
- High Rejection
- Shielded case
- Aqueous washable

Applications

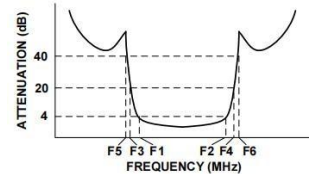
- Test Setup
- Harmonic Rejection
- Transmitters / Receivers

HT-BPF-B503+

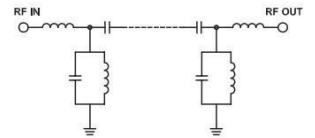


50Ω 495 to 510 MHz

Typical Frequency Response



Functional Schematic



Pin Connections

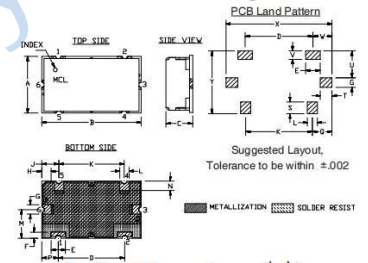
INPUT	1
OUTPUT	2
GROUND	3, 4, 5, 6

Maximum Ratings

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

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

Outline Drawing

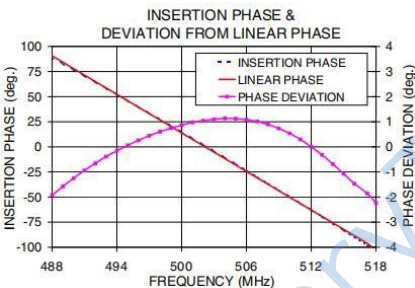
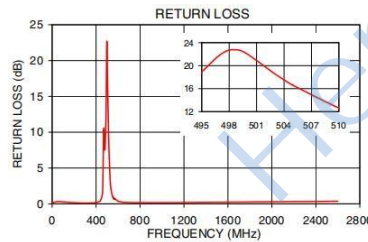
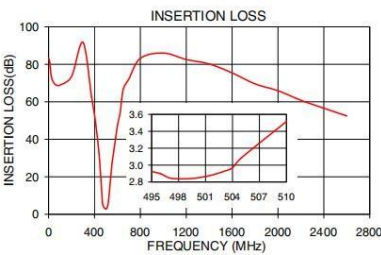


Outline Dimensions: Unit (mm)

A	11.99	B	20.98	C	5.59
D	14	E	3	F	1.19
G	1.98	H	1.92	J	3.61
K	13.79	L	1.98	M	5.99
N	2.01	P	3.51	Q	4.11
S	2.49	T	2.44	U	5.51
V	1.70	W	3.99	X	22
WT		Y	6.0	Z	13

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 4dB)	STOPBAND (MHz)				VSWR(:1)	
		(Loss > 20dB)		(Loss > 40dB)		Passband Max.	Stopband Typ.
F_c	F1 - F2	F3	F4	F5	F6		
503	495-510	440	565	400	610-2600	2.0	30

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Deviation from Linear Phase (deg.)
	\bar{x}	σ			
0.5	83.02	0.71	0.11	488	-1.93
400	53.02	0.41	0.18	489	-1.58
440	31.89	0.57	0.47	490	-1.25
455	19.85	0.75	1.14	492	-0.66
465	10.30	0.61	6.26	494	-0.16
470	5.76	0.40	10.55	496	0.26
495	2.92	0.04	18.91	498	0.60
499	2.84	0.04	22.72	500	0.86
503	2.92	0.07	18.57	501	0.97
505	3.09	0.12	16.57	502	1.04
510	3.52	0.23	12.61	504	1.13
520	6.12	0.66	6.27	506	1.08
530	11.91	0.89	2.92	507	1.01
550	25.33	0.67	1.09	509	0.73
565	32.43	0.57	0.62	510	0.54
610	50.26	0.40	0.32	512	0.00
1600	75.43	0.49	0.23	514	-0.69
2600	52.44	0.19	0.36	518	-2.23



Demo Board MCL P/N: TB-400+ Suggested PCB Layout (PL-247)

