

Surface Mount Bandpass Filter



50Ω 400 to 510 MHz

Features

- Good VSWR, 1.3:1 typ @ passband
- High rejection
- Shielded case
- Aqueous washable

Applications

- Military and avionics
- Receivers / transmitters
- Harmonic rejection

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.

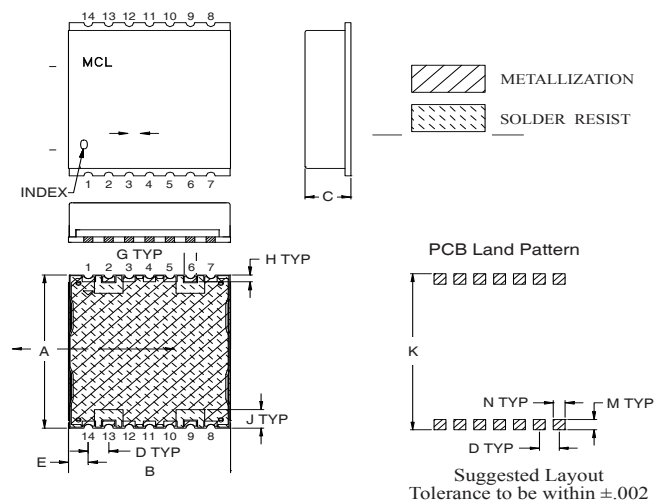
Pin Connections

INPUT	2
OUTPUT	9
NOT CONNECTED	6, 13
GROUND	1, 3, 4, 5, 7, 8, 10, 11, 12, 14



ECO BPF-C450+

Outline Drawing



Outline Dimensions (inch/mm)

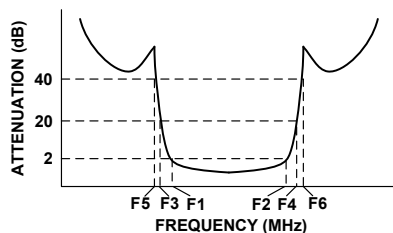
A	B	C	D	E	G	H	J	K	M	N	wt.
.870	.800	.25	.100	.097	.060	.040	.105	.910	.060	.060	grams
22.10	20.32	6.35	2.54	2.46	1.52	1.02	2.67	23.11	1.52	1.52	2.85

Note: Please refer to case style drawing for details

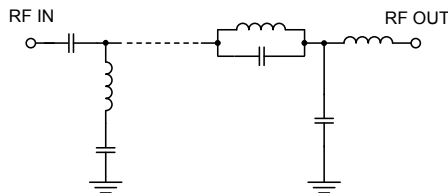
Bandpass Filter Electrical Specifications (T_{AMB} = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 2dB)	STOPBANDS (MHz)				VSWR (:1)		
		Loss > 20dB		Loss > 40dB		Passband		Stopband
F _c	F ₁ - F ₂	F ₃	F ₄	F ₅	F ₆	Typ.	Max.	Typ.
450	400 - 510	310	700	150	760 - 1200	1.3	1.7	18

Typical Frequency Response



Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB) $\bar{x}$	Insertion Loss (dB) σ	Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
0.5	92.65	1.56	0.01	400.0	6.13
150.0	50.75	0.54	0.31	410.0	5.66
310.0	35.49	5.18	0.84	415.0	5.49
340.0	10.85	1.26	1.78	420.0	5.36
355.0	4.37	0.28	4.74	425.0	5.22
365.0	2.16	0.06	7.97	430.0	5.11
400.0	0.86	0.03	20.46	435.0	5.03
430.0	0.81	0.03	16.97	440.0	4.93
450.0	0.81	0.03	17.12	445.0	4.87
470.0	0.80	0.03	20.27	448.0	4.85
510.0	0.80	0.03	25.18	450.0	4.83
580.0	1.48	0.26	18.15	455.0	4.81
610.0	3.03	1.32	5.80	460.0	4.80
625.0	6.05	2.32	2.01	465.0	4.81
640.0	11.26	2.70	0.94	470.0	4.82
700.0	32.58	2.46	0.33	480.0	4.80
760.0	53.15	4.33	0.21	500.0	4.91
1200.0	51.38	2.35	0.39	510.0	4.99

