

Surface Mount Bandpass Filter

50Ω 20 to 1000 MHz

Features

- Sharp roll-off
- Wide bandwidth
- Good VSWR
- Miniature shielded package

Applications

- Test equipment
- Receiver front end applications
- Harmonic rejection

Maximum Ratings

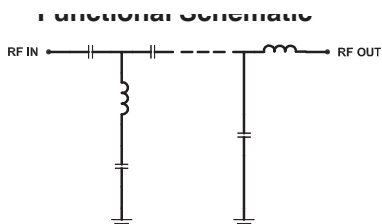
Operating Temperature -40°C to 85°C
Storage Temperature -55°C to 100°C
RF Power Input 1 W

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

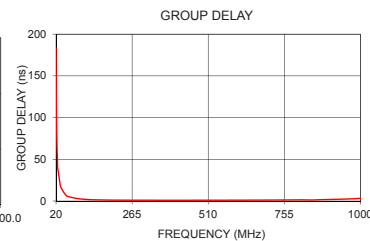
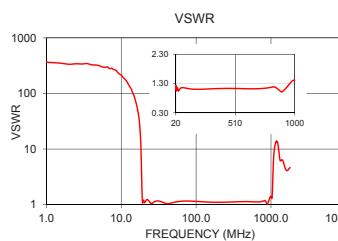
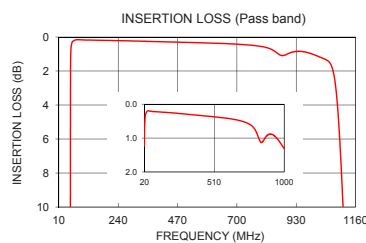
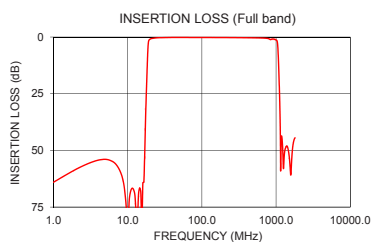
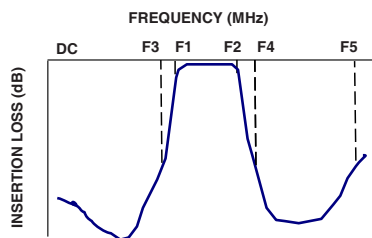
Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
.870	.800	.25	.100	.097	--	.060	.040
22.10	20.32	6.35	2.54	2.46	--	1.52	1.02

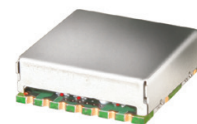
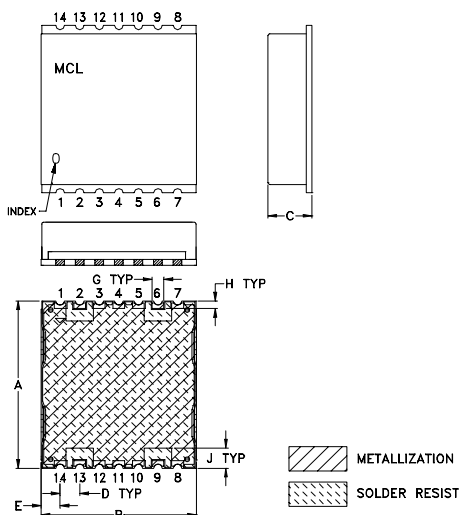
J	K	L	M	N	P	wt
.105	.910	--	.060	.060	--	grams
2.67	23.11	--	1.52	1.52	--	2.85



Typical Frequency Response

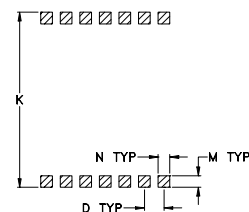


Outline Drawing



ECO BPF-C510+

PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002

Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	—	—	510	—	MHz
	Insertion Loss	F1-F2	—	1.5	2.7	dB
	VSWR	F1-F2	—	1.6	2.01	:1
Stop Band, Lower	Insertion Loss	DC-F3	20	29	—	dB
	VSWR	DC-F3	—	20	—	:1
Stop Band, Upper	Insertion Loss	F4-F5	25	38	—	dB
	VSWR	F4-F5	—	20	—	:1

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1.0	64.03	364.20	20	183.43
10.0	84.00	214.59	21	115.45
17.0	49.57	41.79	22	83.73
17.5	33.17	30.88	23	65.68
18.0	20.49	19.11	24	53.99
18.5	9.11	7.01	25	39.97
18.9	3.08	2.10	30	28.00
20.0	0.95	1.18	40	13.22
100.0	0.22	1.14	50	7.85
250.0	0.27	1.11	75	3.92
510.0	0.37	1.13	100	2.42
750.0	0.58	1.14	200	1.14
1000.0	1.31	1.41	300	0.96
1048.0	3.12	1.94	400	0.93
1080.0	11.63	6.09	500	0.96
1102.0	20.22	9.09	600	1.03
1124.0	30.61	11.09	800	1.39
1150.0	56.84	12.66	900	1.88
1650.0	50.80	4.08	950	2.31
1800.0	44.46	4.62	1000	3.27