

Surface Mount Bandpass Filter



50Ω 290 to 310 MHz

Features

- Narrow bandwidth
- High rejection
- Miniature shielded package

Applications

- Test and measurement
- Harmonic rejection
- Transmitters / Receivers

Maximum Ratings

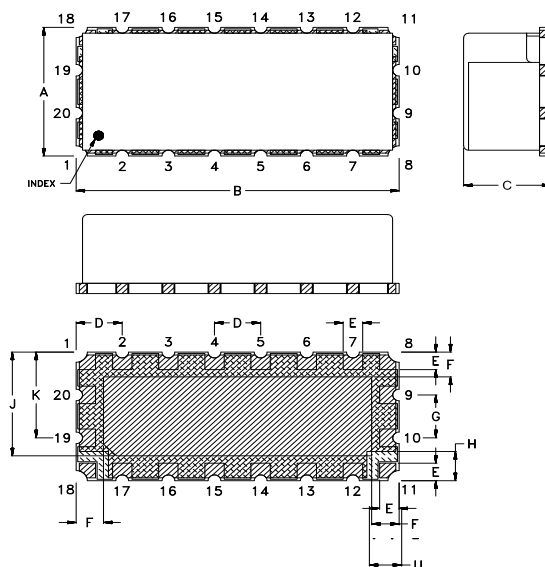
Operating Temperature -40°C to 85°C

Storage Temperature -55°C to 100°C

RF Power Input 0.5 W

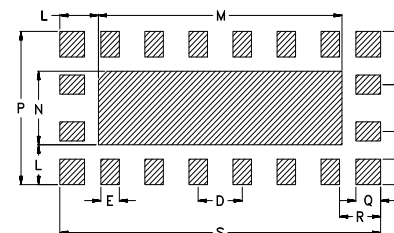
Permanent damage may occur if any of these limits are exceeded.

Outline Drawing



ECO BPF-BC300+

SUGGESTED LAYOUT FOR P.C.PATTERN



METALLIZATION
 SOLDER RESIST

Outline Dimensions (inch)

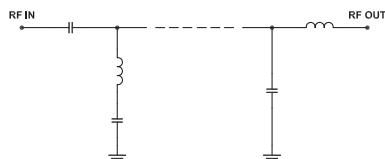
A	B	C	D	E	F	G	H	J	K
.440	1.000	.270	.143	.060	.085	.147	.100	.355	.293
11.18	25.40	6.86	3.63	1.52	2.16	3.73	2.54	9.02	7.45

L	M	N	P	Q	R	S	T	Wt.
.125	.790	.230	.480	.080	0.133	1.040	.167	grams
3.18	20.07	5.84	12.19	2.03	3.37	26.42	4.23	2

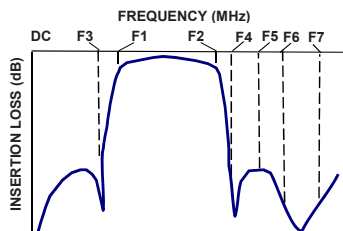
Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	—	—	300	—	MHz
	Insertion Loss	F1-F2	—	2.2	3.0	dB
	VSWR	F1-F2	—	1.4	1.57	:1
Stop Band, Lower	Insertion Loss	DC-F3	40	50	—	dB
	VSWR	DC-F3	—	20	—	:1
	Insertion Loss	F4-F5	40	45	—	dB
Stop Band, Upper		F5-F6	30	40	—	dB
		F6-F7	20	25	—	dB
	VSWR	F4-F7	—	20	—	:1
		350 - 4000	—	—	—	

Functional Schematic



Typical Frequency Response



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	106.97	353.00	290	31.52
10	96.68	347.32	291	30.80
100	83.47	183.51	292	30.19
240	50.46	68.80	293	29.67
264	29.82	35.32	294	29.22
270	22.00	23.10	295	28.85
282	3.65	1.88	296	28.53
290	2.02	1.09	297	28.30
300	1.95	1.25	298	28.14
310	2.18	1.12	299	28.07
318	3.29	1.19	300	28.06
325	12.24	6.08	301	28.11
335	30.14	21.35	302	28.23
350	48.25	41.49	303	28.39
500	68.44	98.08	304	28.60
1000	65.53	154.18	305	28.86
1650	44.89	118.38	306	29.17
1700	56.67	275.53	307	29.54
3000	64.64	149.24	308	29.99
4000	51.06	73.35	310	31.16

