

Surface Mount Bandpass Filter



ECO RBP-188+

50Ω 138 to 238 MHz

Features

- Broader bandwidth
- Low insertion loss
- High rejection
- Miniature shielded package

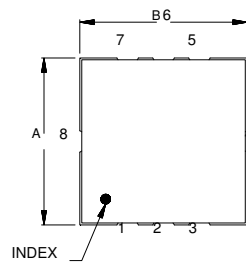
Applications

- Auxiliary broadcasting
- Biomedical telemetry devices
- Private and public land mobile
- Digital television

Pad Connections

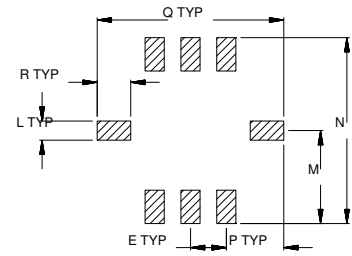
INPUT	2
OUTPUT	6
GROUND	1,3,4,5,7,8

Outline Drawing



METALLIZATION
SOLDER RESIST

PCB Land Pattern



Suggested Layout,
Tolerance to be within ±0.002

Outline Dimensions (inch)

A	B	C	D	E	F	G	H	J
.350	.350	.100	.175	.075	.100	.110	.040	.0808
89	8.89	2.54	4.45	1.91	2.54	2.79	1.02	2.03
K	L	M	N	P	Q	R	wt	
.050	.040	.195	.390	.120	.390	.070	grams	
1.27	1.02	4.95	9.91	3.05	9.91	1.78	0.25	

Note: Please refer to case style drawing for details

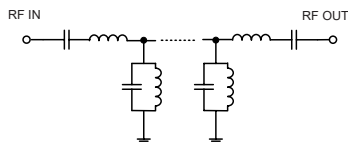
Electrical Specifications at 25°C

Maximum Ratings	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.25 W

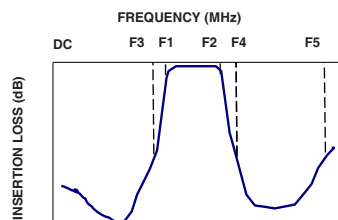
Permanent damage may occur if any of these limits are exceeded.

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	—	—	188	—	Hz
	Insertion Loss	F1-F2	—	1.80	3.00	dB
	VSWR	F1-F2	—	1.38	1.92	:1
Stop Band, Lower	Insertion Loss	DC-F3	20	27	—	dB
	VSWR	DC-F3	—	20	—	:1
Stop Band, Upper	Insertion Loss	F4-F5	20	25	—	dB
	VSWR	F4-F5	—	20	—	:1

Functional Schematic



Typical Frequency Response



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	90.54	17371.78	138	14.15
70	50.37	144.77	140	13.47
92	31.06	48.26	142	12.88
96	27.49	38.61	146	11.92
104	20.16	22.00	155	10.48
112	12.69	10.62	160	9.95
120	6.15	4.01	168	9.30
126	3.28	2.04	173	8.97
138	1.70	1.16	178	8.69
188	1.32	1.34	183	8.46
238	1.73	1.26	188	8.29
252	3.14	2.20	193	8.19
263	6.73	5.27	198	8.17
278	13.48	13.60	203	8.20
296	20.81	24.48	225	8.82
315	27.14	34.07	228	8.99
325	30.00	37.77	230	9.13
500	55.97	72.39	234	9.51
20003	75.06	31.60	236	9.75
600	38.61	28.96	238	10.03

