Surface Mount

Bandpass Filter

50Ω 840 to 1440 MHz

Features

- Wide bandwidth
- Better rejection
- Miniature shielded package

Applications

- Radio telescope Applications
- Radio astronomy
- Defense systems
- Space operation / space research
- Wireless medical telemetry

Maximum Ratings

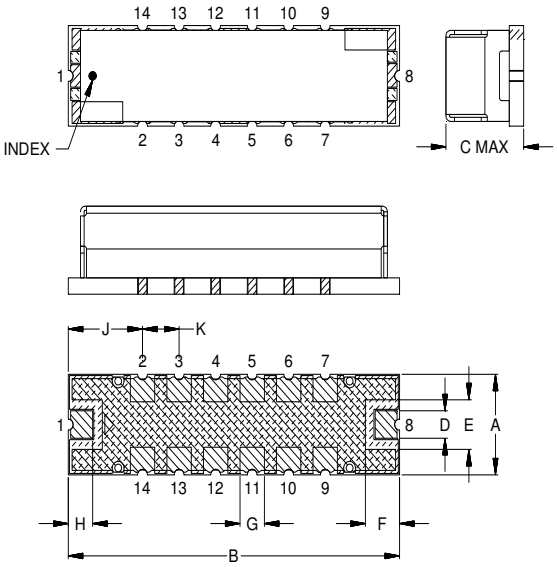
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	1 W

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

Pad Connections

INPUT	1
OUTPUT	8
GROUND	2-7,9,-14

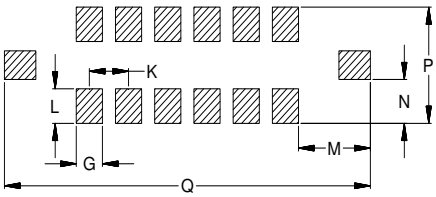
Outline Drawing



ECO BPF-A1140+

METALLIZATION
SOLDER RESIST

PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H
.365	**1.360**	**.35**	**.100**	**.180**	**.140**	**.100**	**.100**
9.27	34.54	8.89	2.54	4.57	3.56	2.54	2.54

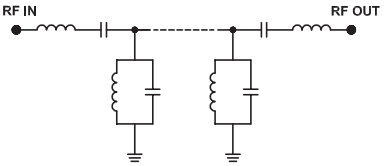
J	K	L	M	N	P	Q	Wt.
.305	**.150**	**.120**	**.275**	**.152**	**.405**	**1.400**	grams
7.75	3.81	3.05	6.99	3.86	10.29	35.56	4.0

Note: Please refer to case style drawing for details

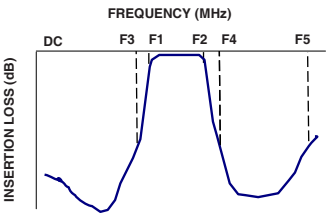
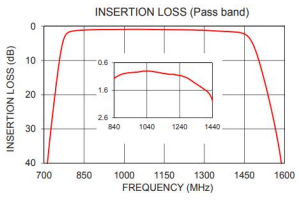
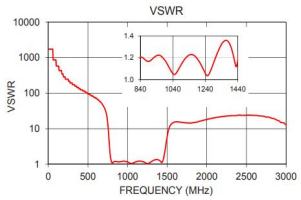
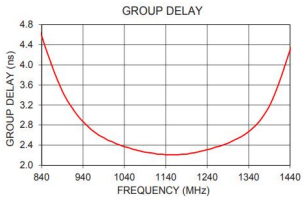
Electrical Specifications at 25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	—	—	—	1140	—	MHz
	Insertion Loss	F1-F2	840-1440	—	2.5	4.0	dB
	VSWR	F1-F2	840-1440	—	1.5	1.9	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC-711	20	30	—	dB
	VSWR	DC-F3	DC-711	—	10	—	:1
Stop Band, Upper	Insertion Loss	F4-F5	1577-3000	20	30	—	dB
	VSWR	F4-F5	1577-3000	—	7.0	—	:1

Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	93.74	1737.18	840	4.59
316	56.11	173.72	890	3.48
711	41.31	37.77	910	3.19
736	23.17	24.14	930	2.96
756	10.87	9.96	950	2.79
771	4.46	3.35	970	2.65
786	2.08	1.54	1000	2.50
840	1.17	1.20	1030	2.40
990	0.93	1.18	1090	2.26
1140	0.99	1.22	1110	2.24
1300	1.20	1.19	1140	2.21
1440	1.97	1.17	1160	2.21
1477	4.47	2.83	1200	2.24
1502	9.50	6.42	1240	2.31
1542	21.30	12.71	1290	2.44
1577	34.42	14.87	1330	2.61
1752	61.83	14.62	1370	2.92
1977	51.62	17.75	1400	3.36
2500	62.22	23.81	1420	3.80
3000	51.17	12.89	1440	4.30

Typical Frequency Response