

Surface Mount Bandpass Filter



ECO SYBP-1275+
50Ω 1100 to 1450 MHz

Features

- High power handling
- Small size
- Temperature stable

Applications

- Military radio
- Lab use
- Satellite communication

Pad Connections

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

Outline Dimensions (inch mm)

A	B	C	D	E	F	G	H
.25	.31	.15	.090	.040	.065	.060	.065
6.35	7.87	3.81	2.29	1.02	1.65	1.52	1.65
J	K	L	N	Q	wt.		
.300	.060	.060	.105	.070	grams		
62	1.52	1.52	2.67	1.78	0.50		

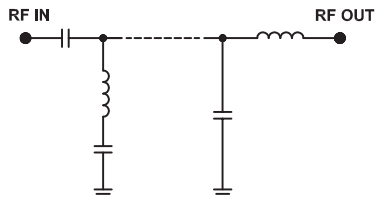
Note: Please refer to case style drawing for details

Maximum Ratings

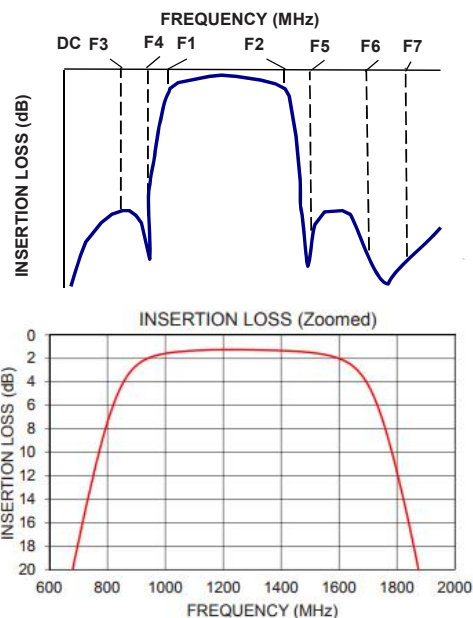
Operating Temperature	-55°C to 100°C
Storage Temperature	55°C to 100°C
RF Power Input*	8 W max. at 25°C

*Passband rating, derate linearly to 3 W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

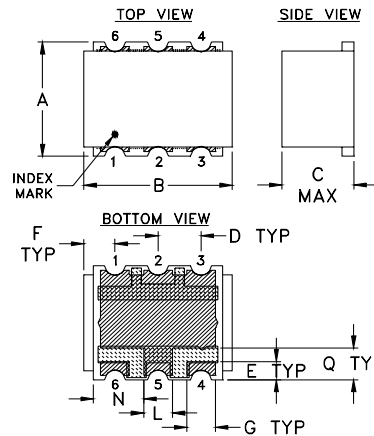
Functional Schematic



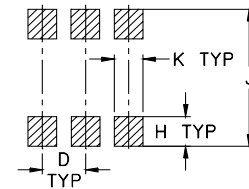
Typical Frequency Response



Outline Drawing



PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002

METALLIZATION
SOLDER RESIST

Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	-	-	1275	-	MHz
	Insertion Loss	F1-F2	-	1.6	2.5	dB
	VSWR	F1-F2	-	1.9	-	:1
Stop Band, Lower	Insertion Loss	DC-F3	30	38	-	dB
		F3-F4	20	28	-	dB
	VSWR	DC-F4	-	28	-	:1
Stop Band, Upper	Insertion Loss	F5-F6	20	30	-	dB
		F6-F7	-	25	-	dB
	VSWR	F5-F7	-	19	-	:1

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
10	77.26	390.02
100	57.65	568.03
200	55.17	321.04
250	56.75	220.58
500	40.97	50.77
600	29.46	32.29
675	20.58	21.26
880	3.11	2.44
1100	1.32	1.48
1275	1.25	1.46
1450	1.38	1.40
1665	3.02	1.92
1875	20.08	11.90
1950	31.10	15.29
2050	42.24	16.54
2500	37.44	10.56
3000	32.25	27.21
3700	37.64	49.27
4000	47.99	52.12
5000	27.74	46.57

