

Features

- Excellent power handling
- Small size
- Temperature stable

Applications

- Military radio
- Lab use
- Satellite communication

HT-SYBP-1950+



50Ω 1700 to 2200 MHz

Electrical Specifications at 25°C

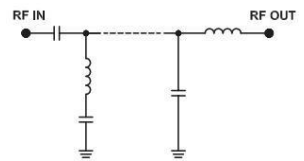
Parameter		F#	Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	-	-	-	1950	-	MHz
	Insertion Loss	F1-F2	1700-2200	-	1.2	2.2	dB
	VSWR	F1-F2	1700-2200	-	1.9	-	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC-880	30	39	-	dB
		F3-F4	880-1030	20	26	-	dB
		DC-F4	DC-1030	-	29	-	:1
Stop Band, Upper	Insertion Loss	F5-F6	2900-4000	20	28	-	dB
		F6-F7	4000-4600	-	20	-	dB
		F5-F7	2900-4600	-	23	-	:1

Typical Performance Data

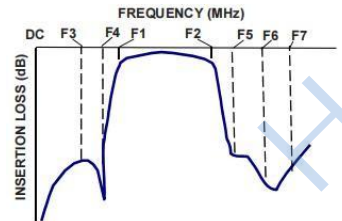
(TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = +25°C)

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
10	81.78	386.31
100	61.33	626.21
200	57.33	686.16
250	57.20	552.76
800	45.00	64.90
880	40.90	51.78
1000	30.40	35.57
1030	27.25	31.55
1090	20.82	23.13
1300	3.18	2.39
1700	0.97	1.35
1950	1.10	1.54
2200	1.22	1.27
2490	3.04	1.50
2690	20.43	6.36
2750	31.68	8.77
2900	40.53	13.34
3000	55.15	14.52
4000	43.40	16.96
4600	28.46	26.27

Functional Schematic



Typical Frequency Response



Maximum Ratings

Operating Temperature -55°C to 100°C

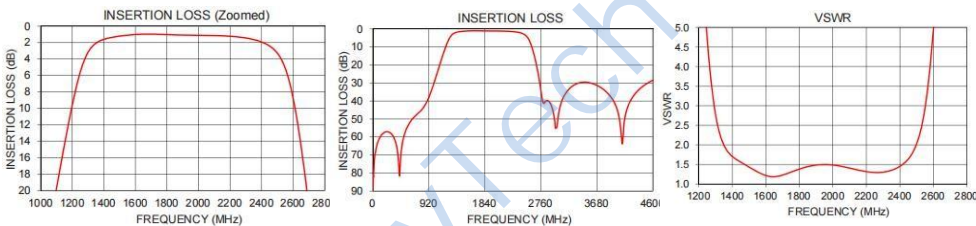
Storage Temperature -55°C to 100°C

RF Power Input* 10W max. at 25°C

*Passband rating, derate linearly to 3.75 W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

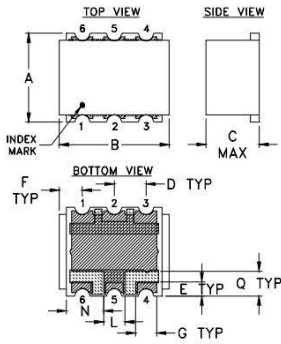
Pin Connections

RF IN	4
RF OUT	6
GROUND	1,2,3,5

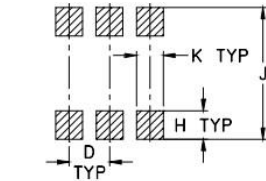


Bandpass Filter



Outline Drawing



PC B L and Patter n



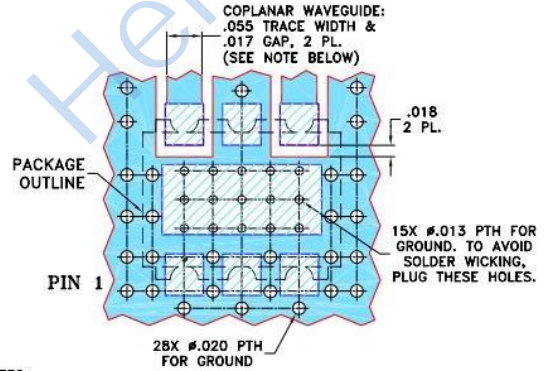
Suggested L layout,
Tolerance to be within ± 0.2

 METALLIZATION
 SOLDER RESIST

Outline Dimensions: Unit (mm)					
A	6.35	B	7.87	C	3.81
D	2.29	E	1.02	F	1.65
G	1.52	H	1.65	J	7.62
K	1.52	L	1.52	N	2.67
Q	1.78	wt			0.50



Suggested PCB Layout

**SUGGESTED MOUNTING CONFIGURATION
FOR TT1423 CASE STYLE "06FL04" PIN CONNECTION**



NOTES:

1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH THICKNESS $.030 \pm .002$ "; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

-  DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
-  DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK