

# Bandpass Filter

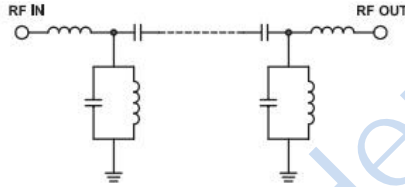
## Features

- Excellent VSWR, 1.3:1 typical in passband
- Flat group delay over passband
- High rejection, 55 dB typical
- Sharp insertion loss roll off
- Shielded case
- Aqueous washable

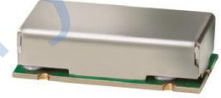
## Applications

- Harmonic rejection
- Radio communications
- ISL / Localiser
- Transmitters / receivers

## Functional Schematic



## HT-BPF-B63+



**50Ω 61 to 65 MHz**

## Electrical Specifications at 25°C

Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	-	-	63	-	MHz
	Insertion Loss	61-65	-	3.6	5	dB
	VSWR	61-65	-	1.3	1.7	:1
Stop Band, Lower	Insertion Loss	DC-55	20	31	-	dB
	VSWR	DC-55	-	36	-	:1
Stop Band, Upper	Insertion Loss	72-2800	20	31	-	dB
	VSWR	72-2800	-	17	-	:1

## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1.0	86.87	19.98	61.0	143.12
51.0	49.57	91.43	61.5	132.47
55.0	33.26	44.55	62.8	119.80
58.0	15.57	10.02	62.0	125.69
59.0	8.90	4.00	62.2	123.57
61.0	3.38	1.09	62.4	122.09
62.0	3.08	1.29	62.5	121.41
63.0	3.00	1.29	62.6	120.80
64.0	3.05	1.10	62.8	119.80
65.0	3.33	1.12	63.0	119.19
67.0	7.08	2.28	63.2	118.94
68.0	12.70	4.95	63.4	119.10
70.0	23.55	11.46	63.5	118.94
72.0	31.75	17.75	63.6	119.23
78.0	47.94	34.75	63.7	119.43
100.0	75.04	82.73	63.8	119.43
500.0	80.34	347.44	63.9	119.94
1000.0	88.82	133.63	64.0	120.27
2000.0	68.52	66.82	64.5	122.94
2800.0	45.50	57.91	65.0	127.87

## Maximum Ratings

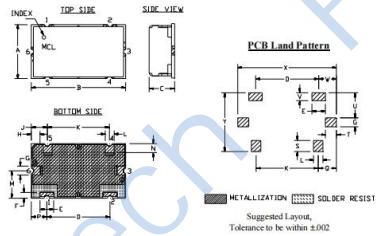
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.11W at 25°C

\*Passband rating, derate linearly to 0.25W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

## Pad Connections

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

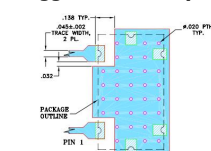
## Outline Drawing



## Outline Dimensions: Unit (mm)

A	11.99	B	20.98
C	5.59	D	14.00
E	3.00	F	1.19
G	1.98	H	1.92
J	3.61	K	13.79
L	1.98	M	5.99
N	2.01	P	3.51
Q	4.11	S	2.49
T	2.44	U	5.51
V	1.70	W	3.99
X	22.00	Y	13.00
wt	6.0g		

## Suggested PCB Layout



NOTE:  
 1. TRACE WIDTH IS SHOWN FOR PPA WITH DIELECTRIC THICKNESS 107.5UM. COUPLER 1.5% OR BASE USE.  
 FOR OTHER MATERIALS TRACE WIDTHS MAY NEED TO BE ADJUSTED.  
 2. BOTTOM SIDE OF THE PCB IS COUPLER SHOWN PLANE.  
 ■ SUGGESTS PCB COUPLER LAYOUT WITH SMOKE  
 ■ SUGGESTS MASK OVER BASE COUPLER  
 ■ SUGGESTS COPPER LAND PATTERN FREE OF SOLDERMASK

