

# Low Pass Filter

## Features

- high rejection
- sharp cut-off
- shielded package
- aqueous washable
- low cost

## Applications

- defense communications
- receivers / transmitters
- harmonic rejection

## HT-SXLP-10+

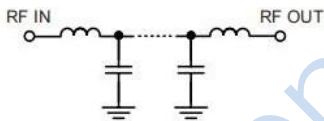


50Ω DC to 10 MHz

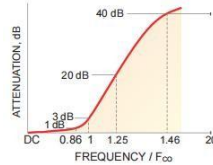
### Low Pass Filter Electrical Specifications (T<sub>AMB</sub>= 25°C)

PASSBAND (MHz)	FCO <sub>1</sub> (MHz) Nom.	STOPBAND (MHz)		VSWR(:1)	
		(Loss<20dB)	(Loss>40dB)	Passband Typ.	Stopband Typ.
DC-10	11.2	14-16	16-230	1.2	18

### Functional Schematic



### Typical Frequency Response



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	χ	σ			
0.5	0.03	0.00	32.90	0.5	60.52
2.0	0.07	0.00	25.67	2.5	61.12
5.0	0.15	0.01	27.63	2.7	62.00
8.0	0.29	0.01	28.96	2.9	63.30
10.0	0.58	0.02	26.84	3.1	63.10
10.5	0.95	0.07	15.52	3.3	63.12
11.0	2.14	0.19	7.72	3.5	63.40
11.2	3.05	0.26	5.59	4.0	65.03
11.7	6.53	0.44	2.34	5.0	68.54
12.4	13.07	0.57	0.81	6.0	73.24
14.0	28.71	0.68	0.26	7.5	85.27
16.0	49.92	1.04	0.15	8.0	89.81
20.0	77.84	4.07	0.10	8.3	94.14
30.0	74.45	1.46	0.09	8.5	97.89
100.0	75.56	2.51	0.12	9.0	107.77
120.0	72.40	2.09	0.13	9.6	122.71
140.0	69.23	1.51	0.13	10.0	140.89
160.0	66.85	1.18	0.14	10.5	172.46
200.0	64.18	0.83	0.15	11.0	200.44
230.0	63.37	0.87	0.16	11.2	204.40

### Maximum Ratings

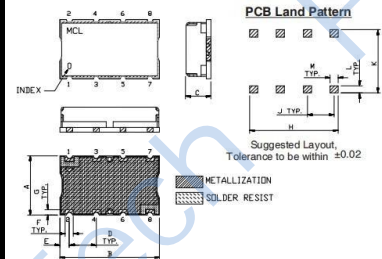
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.5W max.

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

### Pin Connections

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

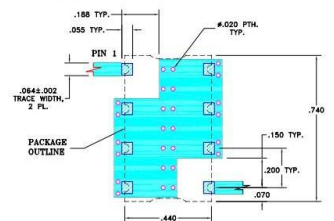
### Outline Drawing



### Outline Dimensions: Unit ( mm )

Dimension	Value	Dimension	Value
A	11.18	G	1.02
B	18.80	H	16.76
C	6.86	J	5.08
D	5.08	K	11.94
E	1.78	L	1.40
F	1.52	M	1.52
WT			0.3g

Demo Board P/N: TB-368  
Suggested PCB Layout (PL-230)



- NOTE:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .005"±.005" COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
  2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
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