

Low Pass Filter

Features

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

Applications

- defense communications
- receivers / transmitters
- harmonic rejection

HT-SXLP-36+

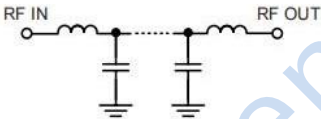


50Ω DC to 36 MHz

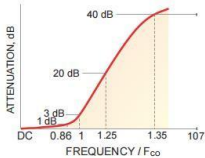
Low Pass Filter Electrical Specifications (T_{AMB}= 25°C)

PASSBAND (MHz)	FCO ₀ (MHz) Nom.	STOPBAND (MHz)		VSWR(:1)	
		(Loss < 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC-36	40	50-57	57-560	1.3	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)
	$\bar{x}$	σ			
0.5	0.01	0.00	38.73	0.5	16.94
1.5	0.02	0.00	35.43	2.0	16.96
4.0	0.04	0.00	28.46	8.0	17.22
10.0	0.08	0.01	23.57	9.0	17.33
23.0	0.16	0.01	31.50	9.5	17.40
32.0	0.32	0.01	27.33	10.0	17.47
36.0	0.49	0.02	32.45	10.5	17.53
38.0	0.83	0.03	15.46	11.0	17.66
39.2	1.67	0.03	8.33	11.5	17.71
40.0	2.82	0.04	5.25	12.0	17.83
41.2	5.62	0.09	2.52	12.0	18.05
43.0	11.31	0.14	0.95	13.0	18.55
50.0	32.26	0.24	0.24	15.0	18.56
57.0	69.51	3.35	0.17	17.0	19.17
70.0	70.55	1.15	0.15	19.0	20.88
80.0	77.59	0.51	0.14	21.0	26.02
100.0	81.58	0.73	0.13	28.0	28.38
200.0	71.18	2.26	0.15	30.0	33.68
400.0	58.81	0.73	0.19	33.0	44.89
560.0	59.98	0.85	0.23	40.0	64.15

Maximum Ratings

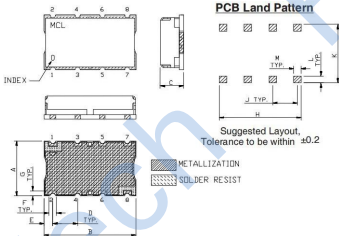
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.5W max.

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

Pin Connections

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

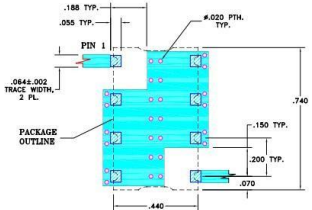
Outline Drawing



Outline Dimensions: Unit (mm)

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		

Suggested PCB Layout



- NOTE:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .025"±.002" 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.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BASE COPPER)
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK