

Low Pass Filter

Features

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

Applications

- test equipments
- defense communications
- receivers / transmitters
- harmonic rejection

HT-SXLP-90+

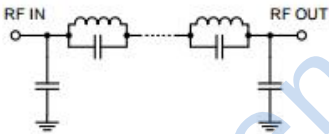


50Ω DC to 90 MHz

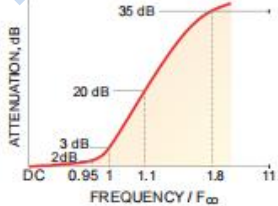
Low Pass Filter Electrical Specifications (T_{AMB}= 25°C)

PASSBAND (MHz)	FCO ₂ (MHz) Nom.	STOPBAND (MHz)		VSWR(:1)	
		(Loss>20dB)	(Loss>40dB)	Passband Typ.	Stopband Typ.
(Loss<1dB)	(Loss 3dB)				
DC-90	94	105-170	170-1000	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)
	$\bar{x}$	σ			
1.0	0.03	0.02	41.95	1.0	4.63
5.0	0.06	0.02	35.35	2.0	4.63
20.0	0.11	0.02	24.82	5.0	4.58
50.0	0.21	0.02	25.05	10.0	4.57
75.0	0.40	0.02	35.12	15.0	4.73
85.0	0.66	0.02	32.46	20.0	4.74
90.0	1.08	0.02	31.00	30.0	4.84
93.0	2.09	0.12	13.12	40.0	5.41
94.0	2.96	0.19	9.38	50.0	5.84
95.0	4.40	0.29	6.45	60.0	6.74
97.0	9.70	0.44	2.99	65.0	7.39
99.0	18.72	0.68	1.69	70.0	8.47
100.0	25.21	0.94	1.38	75.0	9.94
105.0	27.65	0.93	0.76	80.0	12.14
170.0	39.96	1.75	0.30	85.0	16.65
300.0	31.73	0.23	0.35	87.0	18.81
500.0	34.60	0.18	0.33	89.0	23.75
945.0	58.72	2.92	0.24	89.5	24.88
1000.0	51.39	1.46	0.28	90.0	27.29

Maximum Ratings

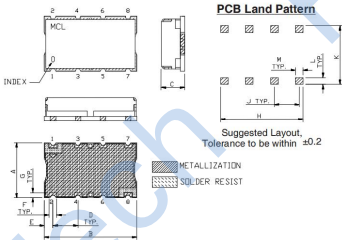
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.5W max.

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

Pin Connections

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

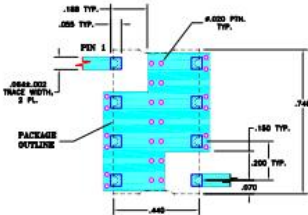
Outline Drawing



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. TRACK WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: 0.075" (0.0015"). COPPER: 1/2 OZ. BACK SIDE: 1/2 OZ. FOR OTHER MATERIALS TRACK WIDTH MAY NEED TO BE MODIFIED.
 2. BOTTOM SIDE OF THE PCB IS CONTIGUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH RESIN (HOLE) MARK OVER BARE COPPER
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MARK

