

Low Pass Filter

Features

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

Applications

- defense communications
- receivers / transmitters
- harmonic rejection

HT-SXLP-25+

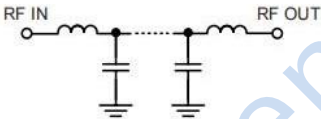


50Ω DC to 25 MHz

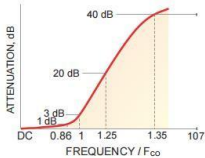
Low Pass Filter Electrical Specifications (T_{AMB}= 25°C)

PASSBAND (MHz)	FCO ₀ (MHz) Nom.	STOPBAND (MHz)		VSWR(:1)	
		(Loss<20dB)	(Loss>40dB)	Passband Typ.	Stopband Typ.
DC-25	28	36-47	47-1000	1.7	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	0.02	0.00	45.42	0.5	31.44
1.5	0.05	0.00	31.78	2.0	31.60
4.0	0.08	0.00	24.60	4.0	31.52
12.0	0.16	0.01	27.89	6.0	31.81
21.0	0.31	0.01	24.97	8.0	32.44
25.0	0.45	0.01	31.31	10.0	33.25
26.5	0.82	0.02	13.63	12.0	34.06
27.4	1.66	0.04	7.75	14.0	35.03
28.0	2.67	0.06	5.18	16.0	36.41
29.0	5.11	0.11	2.63	18.0	38.75
31.0	11.27	0.18	0.88	20.0	41.52
36.0	24.96	0.31	0.27	21.0	43.16
47.0	45.89	0.87	0.16	22.0	45.08
100.0	73.36	1.56	0.12	23.0	47.69
300.0	83.77	2.45	0.16	24.0	51.89
500.0	84.18	1.52	0.22	25.0	59.31
800.0	75.17	1.62	0.31	26.8	71.58
1000.0	68.20	1.98	0.37	29.0	15.97

Maximum Ratings

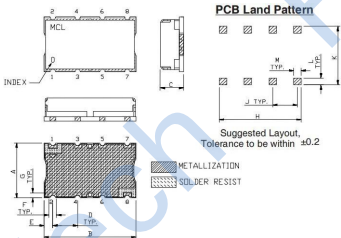
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.5W max.

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

Pin Connections

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

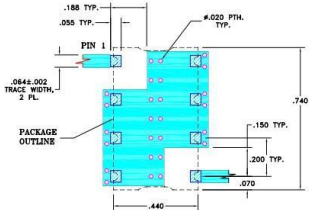
Outline Drawing



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: .002"±.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