

Low Pass Filter

Features

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

Applications

- defense communications
- receivers / transmitters
- harmonic rejection

HT-SXLP-5+

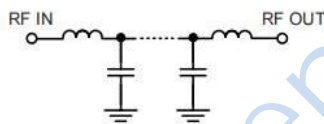


50Ω DC to 5MHz

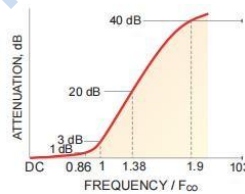
Low Pass Filter Electrical Specifications (T_{AMB}= 25°C)

PASSBAND (MHz)	FCO ₃ (MHz) Nom.	STOPBAND (MHz)		VSWR(:1)	
		(Loss<20dB)	(Loss>40dB)	Passband Typ.	Stopband Typ.
DC-5	5.8	8-11	11-600	1.7	18

Functional Schematic

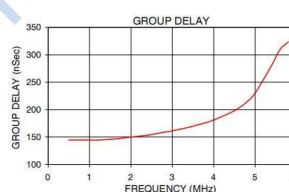
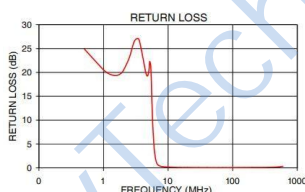


Typical Frequency Response



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	\bar{x}	σ			
0.5	0.14	0.01	24.96	0.5	144.47
1.0	0.19	0.01	20.52	1.0	144.53
3.0	0.28	0.01	26.53	1.2	144.36
5.0	0.59	0.02	20.05	1.6	146.31
5.6	1.03	0.08	14.37	1.8	148.02
5.8	1.75	0.15	8.91	2.0	149.91
6.0	3.12	0.26	5.25	2.4	153.25
6.2	5.18	0.37	3.04	2.8	158.65
6.5	9.03	0.47	1.42	3.0	161.28
7.2	18.17	0.54	0.46	3.4	167.81
8.0	26.98	0.55	0.27	3.6	171.89
11.0	50.31	0.79	0.13	3.8	175.98
15.0	72.81	3.70	0.08	4.0	181.00
20.0	85.05	5.02	0.07	4.4	194.27
40.0	83.17	2.38	0.05	4.8	214.04
80.0	84.66	1.98	0.04	5.0	230.15
100.0	92.67	3.38	0.05	5.4	281.00
400.0	87.76	6.66	0.11	5.6	309.78
600.0	77.91	3.06	0.32	5.8	323.56



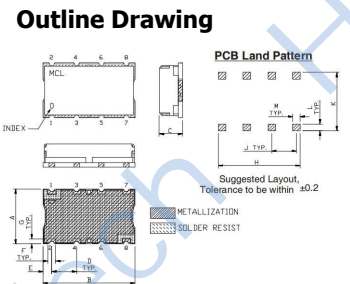
Maximum Ratings

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

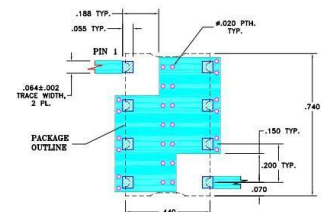
INPUT	1
OUTPUT	8
GROUND	2,3,4,5,6,7



Outline 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: .0025"±.0005" 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.