

Low Pass Filter

Features

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

Applications

- defense communications
- receivers / transmitters
- harmonic rejection

HT-SXLP-4.7+

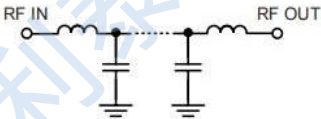


50Ω DC to 4.7MHz

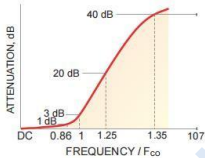
Low Pass Filter Electrical Specifications (T_{AMB}= 25°C)

PASSBAND (MHz)	FCO ₀ (MHz) Nom.	STOPBAND (MHz)		VSWR(:1)	
		(Loss < 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
(Loss > 1dB)	(Loss 3dB)				
DC-4.7	5.6	6.6-7.4	7.4-600	1.25	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	0.08	0.01	25.94	0.5	132.84
2.7	0.20	0.01	34.92	1.2	117.19
2.7	0.20	0.01	34.92	1.4	120.85
4.5	0.49	0.02	30.78	1.6	124.16
4.7	0.56	0.02	33.74	1.8	124.50
5.3	1.02	0.04	22.84	2.0	127.50
5.6	2.09	0.32	10.91	2.5	131.07
5.8	4.70	0.75	4.32	3.0	142.83
6.0	9.43	1.03	1.65	3.5	160.70
6.2	15.17	1.09	0.78	4.0	182.44
6.6	27.16	1.10	0.33	4.5	223.68
7.4	57.30	1.96	0.16	4.7	245.95
15.0	52.02	0.24	0.07	4.8	255.31
23.0	61.33	0.16	0.07	5.0	295.98
40.0	69.54	0.59	0.10	5.2	352.27
100.0	65.17	0.41	0.14	5.3	385.52
200.0	57.06	0.25	0.18	5.4	438.20
400.0	58.40	0.26	0.22	5.5	484.24
600.0	55.96	0.30	0.27	5.6	521.62

Maximum Ratings

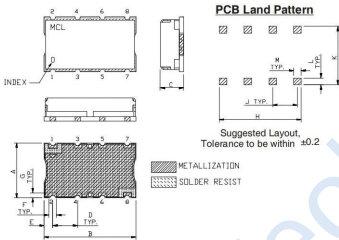
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.5W max.

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

Pin Connections

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

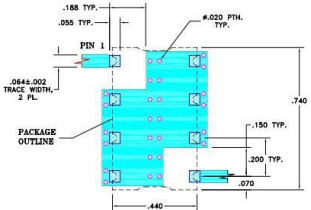
Outline Drawing



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