

Low Pass Filter

Features

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

Applications

- defense communications
- receivers / transmitters
- harmonic rejection

HT-SXLP-44+



50Ω DC to 44 MHz

Maximum Ratings

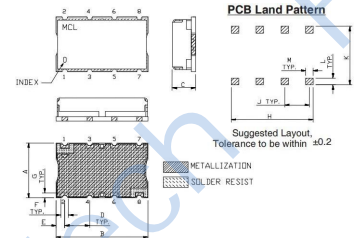
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.5W max.

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

Pin Connections

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

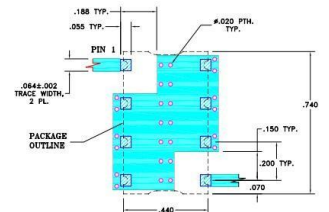
Outline Drawing



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



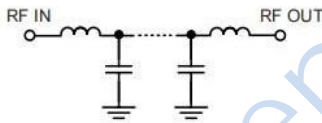
- NOTE:
1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .0025"±.0005" COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BASE COPPER)
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

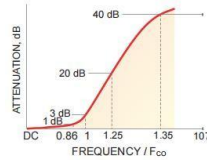
Low Pass Filter Electrical Specifications (T_{AMB}= 25°C)

PASSBAND (MHz)	FCO ₀ (MHz) Nom.	STOPBAND (MHz)		VSWR(:1)	
		(Loss < 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC-44	48.5	59-65.5	65.5-600	1.4	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)
	χ	σ			
0.5	0.01	0.00	39.49	0.5	13.62
3.0	0.02	0.00	31.76	2.0	13.59
6.0	0.04	0.00	26.28	10.1	13.81
11.0	0.08	0.00	22.65	11.5	13.91
28.0	0.16	0.00	33.95	12.0	14.0
39.0	0.33	0.01	28.35	13.0	14.11
44.0	0.50	0.01	25.88	14.0	14.18
46.8	1.19	0.07	9.82	15.0	14.30
48.5	2.84	0.16	4.83	18.0	14.76
49.0	3.61	0.16	3.85	20.0	15.22
52.0	10.59	0.22	1.00	30.0	18.41
56.0	22.73	0.38	0.37	35.0	21.52
65.5	30.40	2.35	0.27	37.0	23.16
80.0	58.16	0.89	0.18	38.0	24.08
100.0	62.88	0.37	0.15	40.0	26.76
200.0	66.31	0.84	0.12	42.0	30.55
300.0	68.65	1.32	0.12	43.5	34.75
400.0	58.80	0.69	0.13	44.0	36.49
600.0	56.94	0.88	0.8	48.5	51.73

