

Low Pass Filter

Features

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

Applications

- defense communications
- receivers / transmitters
- harmonic rejection

HT-SXLP-65+

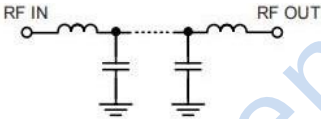


50Ω DC to 65 MHz

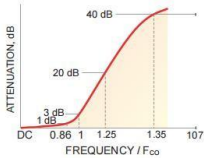
Low Pass Filter Electrical Specifications (T_{AMB}= 25°C)

PASSBAND (MHz)	FCO ₀ (MHz) Nom.	STOPBAND (MHz)		VSWR(:1)	
		(Loss < 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC-65	71	86-96	96-710	1.3	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	0.00	0.00	40.20	0.5	10.29
2.0	0.01	0.00	36.47	2.0	9.73
4.0	0.02	0.00	31.19	10.0	9.61
8.0	0.04	0.00	25.68	12.0	9.67
12.5	0.08	0.01	22.39	14.0	9.74
40.0	0.17	0.00	33.51	18.0	9.85
55.0	0.34	0.01	34.56	20.0	9.98
65.0	0.56	0.01	31.87	25.0	10.34
69.0	1.43	0.05	12.39	30.0	10.87
71.0	2.83	0.07	6.52	35.0	11.49
73.0	5.41	0.09	3.26	38.0	11.90
76.0	10.87	0.14	1.27	40.0	12.20
81.0	22.97	0.18	0.50	42.0	12.68
86.0	31.32	0.19	0.33	44.0	13.08
96.0	63.69	1.46	0.22	47.0	13.82
200.0	84.35	1.60	0.11	51.0	15.08
300.0	74.14	0.71	0.12	55.0	16.86
400.0	61.96	0.21	0.13	62.0	22.02
500.0	57.17	0.22	0.13	65.0	26.65
710.0	56.34	0.33	0.16	70.0	37.59

Maximum Ratings

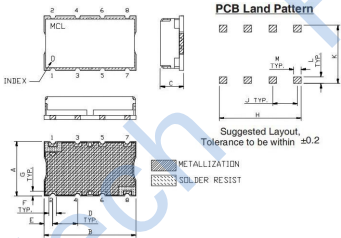
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.5W max.

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

Pin Connections

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

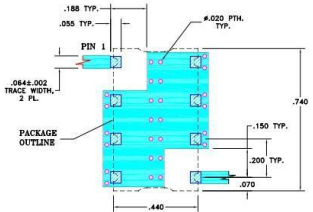
Outline Drawing



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: 0.0075-0.008" 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