HenryTech

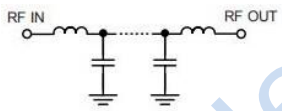
Low Pass Filter

HT-SXLP-29+

Features
- Low Insertion Loss typical 0.5dB
- Sharp roll-off
- Wide band rejection till 2500 MHz
- Very good VSWR typical 1.3:1

Applications
- Defense system
- Test and measurement

Functional Schematic



50Ω DC to 29 MHz

Electrical Specifications at 25°C

Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-29	-	0.5	1.2	dB
	Freq. Cut-Off	32.5	-	3.0	-	dB
	VSWR	DC-29	-	1.3	-	:1
Stop Band	Insertion Loss	38	20	30	-	dB
		42-400	40	55	-	dB
	VSWR	400-2500	-	30	-	dB
		38-2500	-	20	-	:1

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	2W Max. @ 25°C

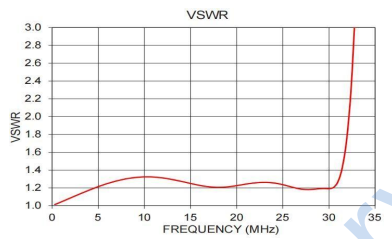
Permanent damage may occur if any of these limits are exceeded.

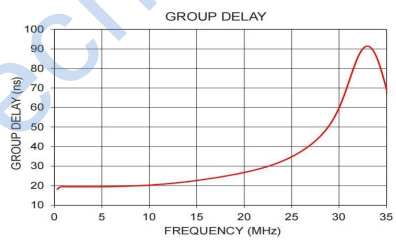
Pin Connections

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

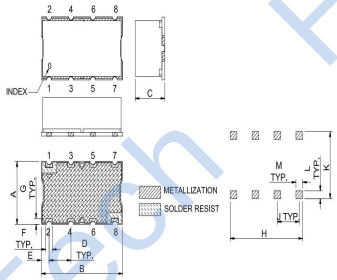
Typical Performance Data at 25℃

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1.0	0.04	1.04	1.0	19.48
5.0	0.09	1.21	2.0	19.45
29.0	0.48	1.19	4.0	19.40
32.5	2.06	2.49	6.0	19.50
33.0	3.26	3.68	8.0	19.79
35.0	12.26	19.42	10.0	20.24
36.5	20.44	41.23	12.0	21.00
38.0	28.84	62.34	14.0	22.01
38.5	31.77	68.81	16.0	23.30
40.0	41.33	86.62	18.0	24.87
42.0	60.53	107.95	20.0	26.73
50.0	60.00	173.40	21.0	27.86
100.0	55.82	203.24	22.0	29.14
250.0	78.99	123.88	23.0	30.67
400.0	55.85	101.08	24.0	32.53
755.0	58.70	82.51	25.0	34.77
1005.0	37.43	84.93	26.0	37.51
1500.0	35.79	73.94	27.0	40.88
2000.0	31.85	37.71	28.0	45.19
2500.0	31.55	23.93	29.0	51.06





Outline Drawing

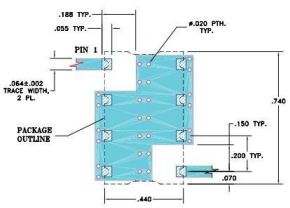


Suggested Layout Tolerance to be within ±0.5

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: .020"±.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 BARE COPPER)
DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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