Jieying Communication Technology (Shenzhen) Co., Ltd.
http://www.jytxjs.cn

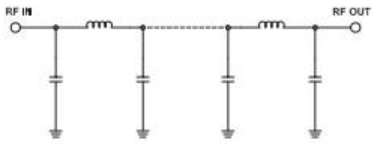
Low Pass Filter

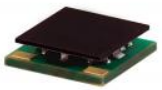
JY-ULP-30+

Features
- High rejection
- Sharp insertion loss roll-off
- Good VSWR, 1.3 typical in passband
- Ultra miniature surface mount package

Applications
- Wireless communications
- Receivers/transmitters
- Lab use

Functional Schematic





50Ω DC to 30 MHz

Electrical Specifications at 25°C

Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-30	-	1.8	2.5	dB
	Freq. Cut-Off	37	-	3.0	-	dB
	VSWR	DC-30	-	1.38	-	:1
Stop Band	Insertion Loss	47-53	20	27	-	dB
		53-3000	40	47	-	dB
	VSWR	47-3000	-	20	-	:1

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.1W Max. @ 25°C

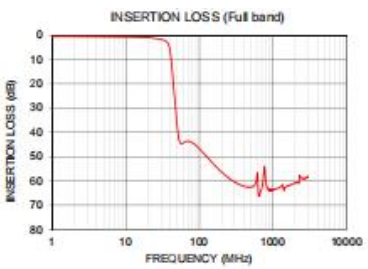
Permanent damage may occur if any of these limits are exceeded.

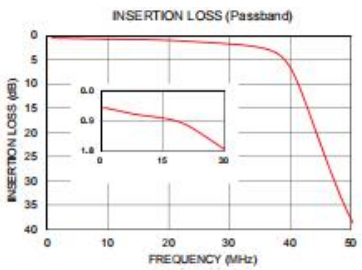
Pin Connections

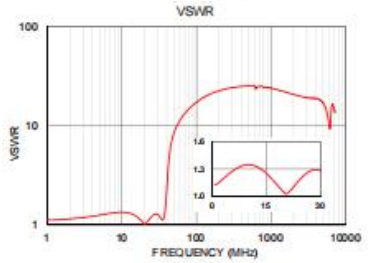
INPUT	1
OUTPUT	3
GROUND	2,4,5,6

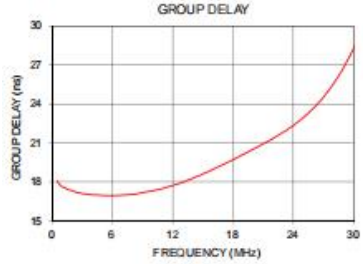
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	0.53	1.13	1	17.61
10	0.74	1.35	2	17.32
20	0.99	1.03	3	17.10
30	1.75	1.28	5	16.96
37	3.19	1.22	6	16.94
38	3.84	1.40	8	17.05
44	19.12	5.60	9	17.16
45	20.86	5.94	10	17.31
47	29.30	7.29	12	17.71
48	32.43	7.73	14	18.28
51	40.19	8.86	15	18.61
53	43.20	9.50	18	19.71
100	46.80	17.27	20	20.52
250	58.85	23.67	21	20.92
300	60.46	24.30	22	21.34
500	62.56	25.13	24	22.33
750	56.64	25.13	25	22.97
1000	63.71	24.07	27	24.52
2000	60.85	20.77	28	25.57
3000	58.09	19.27	30	28.28

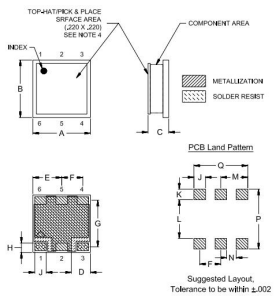








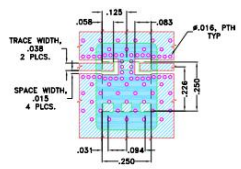
Outline Drawing



Outline Dimensions: Unit (mm)

A	6.35	J	1.27
B	6.35	K	1.17
C	2.10	L	4.27
D	1.90	M	2.97
E	3.18	N	1.07
F	2.34	P	6.60
G	5.11	Q	5.94
H	1.04	WT	0.25g

Suggested PCB Layout



NOTES:
1. TRACE WIDTH IS SHOWN FOR ROGERS (RO4350B) WITH DIELECTRIC THICKNESS .020"±.0015", 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 SOLDERMASK

JY-ULP-30+

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