

Low Pass Filter

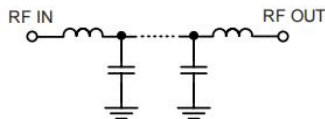
Features

- High rejection
- Sharp insertion loss roll-off
- Good VSWR, 1.1:1 typ at passband
- Ultra miniature surface mount package

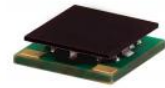
Applications

- Wireless communications
- Receivers / Transmitters
- Lab use

Functional Schematic



JY-ULP-70+



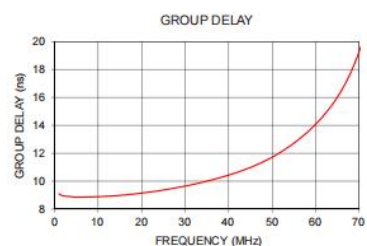
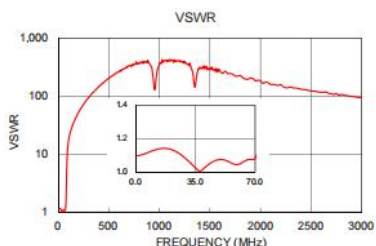
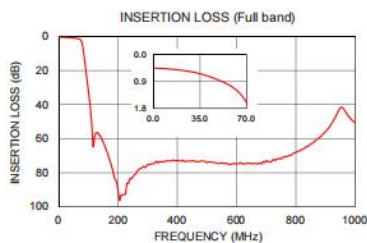
50Ω DC to 70 MHz

Electrical Specifications at 25°C

Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-70	-	1.5	2.0	dB
	Freq. Cut-Off	77	-	3.0	-	dB
	VSWR	DC-70	-	1.2	-	:1
Stop Band	Insertion Loss	100-115	20	27	-	dB
		115-700	40	47	-	dB
	VSWR	700-3000	-	20	-	dB
		100-700	-	20	-	:1

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1.0	0.46	1.10	1	9.09
10.0	0.48	1.13	2	8.95
50.0	0.87	1.07	4	8.88
70.0	1.60	1.08	10	8.89
77.0	3.05	1.86	12	8.92
85.0	10.73	6.81	14	8.96
92.0	20.52	12.40	18	9.07
99.0	30.43	16.14	20	9.15
100.0	31.88	16.58	28	9.53
115.0	62.35	22.26	34	9.93
150.0	62.18	34.15	40	10.43
250.0	82.23	71.48	44	10.87
500.0	74.09	202.04	50	11.72
700.0	72.96	333.48	52	12.09
750.0	71.93	349.05	58	13.49
1000.0	50.72	369.47	60	14.08
1500.0	80.48	300.57	62	14.76
2000.0	62.90	182.55	64	15.56
2500.0	60.91	121.34	68	17.73
3000.0	61.09	92.42	70	19.28



Maximum Ratings

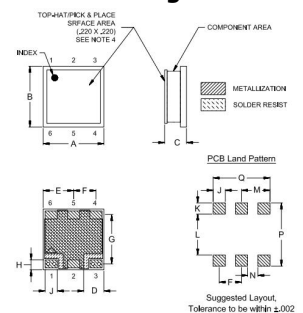
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.1W Max. @ 25°C

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

Pin Connections

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

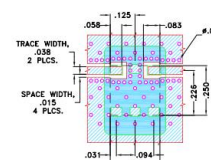
Outline Drawing



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