

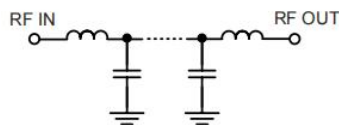
Features

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

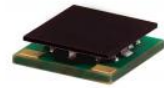
Applications

- Wireless communications
- Receivers / Transmitters
- Lab use

Functional Schematic



JY-ULP-105+



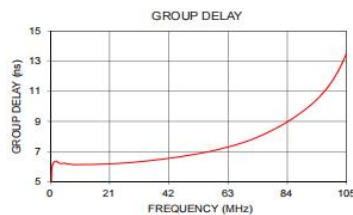
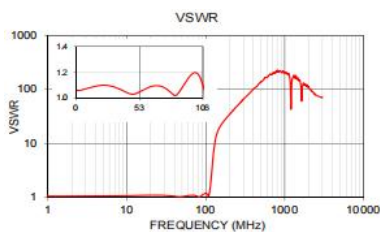
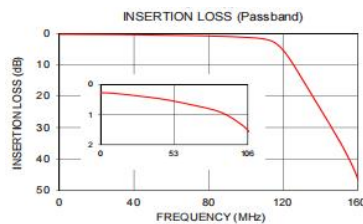
50Ω DC to 105 MHz

Electrical Specifications at 25°C

Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-105	-	1.5	2.0	dB
	Freq. Cut-Off	116	-	3.0	-	dB
	VSWR	DC-105	-	1.1	-	:1
Stop Band	Insertion Loss	145-165	20	27	-	dB
		165-1000	40	47	-	dB
	VSWR	1000-3000	-	20	-	dB
		145-1000	-	20	-	:1

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	0.28	1.06	1	6.24
10	0.30	1.08	5	6.23
60	0.63	1.08	10	6.13
105	1.47	1.13	15	6.14
110	1.81	1.12	20	6.17
116	3.16	2.00	25	6.22
117	3.59	2.27	30	6.29
120	5.34	3.43	40	6.50
130	14.29	10.18	50	6.78
136	20.18	13.99	55	6.95
145	28.97	18.14	60	7.16
147	30.96	18.91	65	7.40
150	34.04	19.99	70	7.71
158	43.28	22.61	75	8.08
165	55.18	24.65	80	8.54
300	60.58	65.99	85	9.09
500	63.66	138.88	90	9.74
1000	60.23	201.46	95	10.55
2500	60.46	78.21	100	11.70
3000	59.66	71.50	105	13.52



Maximum Ratings

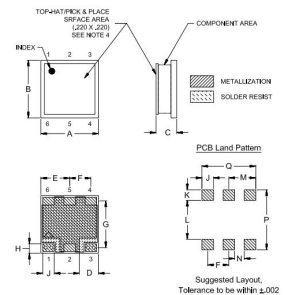
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.15W Max. @ 25°C

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

Pin Connections

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

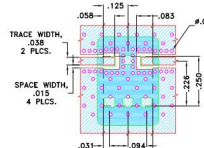
Outline Drawing



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 (R04350B) WITH DIELECTRIC THICKNESS 0.020"±0.015". 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