

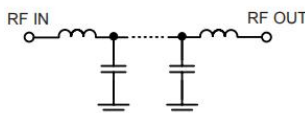
Features

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

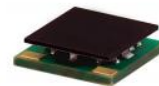
Applications

- Wireless communications
- Receivers / Transmitters
- Lab use

Functional Schematic



JY-ULP-83+



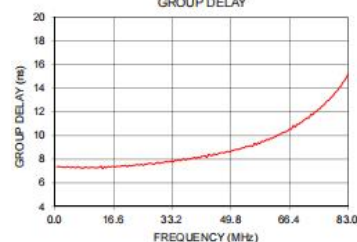
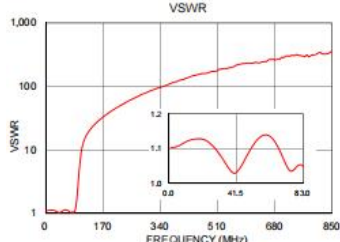
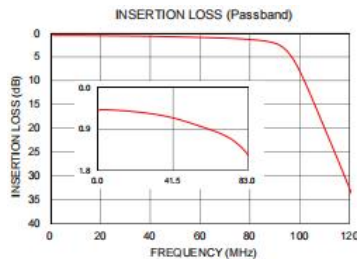
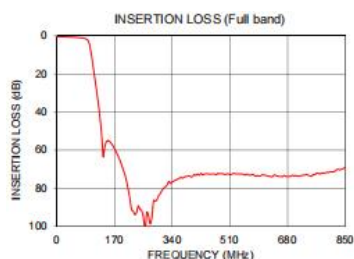
50Ω DC to 83 MHz

Electrical Specifications at 25°C

Parameter		Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-83	-	1.5	2.0	dB
	Freq. Cut-Off	93	-	3.0	-	dB
	VSWR	DC-83	-	1.1	-	:1
Stop Band	Insertion Loss	118-135	20	27	-	dB
		135-850	40	47	-	dB
	VSWR	135-850	-	20	-	:1

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	0.49	1.10	1	7.38
10	0.49	1.12	2	7.32
40	0.65	1.03	5	7.36
80	1.33	1.05	10	7.32
83	1.46	1.05	15	7.38
90	2.12	1.29	20	7.49
93	2.91	1.75	25	7.49
94	3.32	1.99	35	7.97
100	7.99	4.88	40	8.07
105	13.83	8.64	45	8.46
110	20.05	11.98	50	8.72
118	30.11	15.84	55	9.12
130	47.92	20.24	60	9.67
135	60.20	21.89	65	10.32
200	72.50	42.77	68	10.72
400	73.75	126.88	70	11.17
500	72.57	173.05	75	12.27
600	73.45	234.35	78	13.18
700	73.60	289.59	80	13.82
850	69.00	355.59	83	15.20



Maximum Ratings

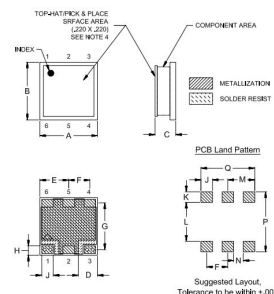
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.15W Max. @ 25°C

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

Pin Connections

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

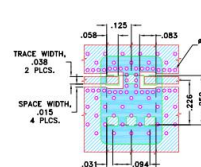
Outline Drawing



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 (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 SOLDER MASK