

**F7000 SERIES
MICROWAVE FERRITE
ISOLATORS AND CIRCULATORS**



This range of low cost co-axial isolators and circulators based on advanced ferrite materials technology is ideally suited for communications, radar and terrestrial radio applications.

- Operating frequency range 800MHz – 18GHz
- Isolation up to 23dB
- Insertion loss down to 0.3dB
- Peak power up to 500W
- Specified temperature ranges



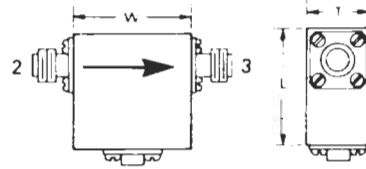


STANDARD 3-PORT ISOLATORS & CIRCULATORS

MODEL NO.	FREQUENCY GHz	ISOLATION dB (Min.)	INSERTION LOSS dB (Max.)	VSWR (Max.)	OPERATING TEMPERATURE °C	CIRCULATOR POWER (Watts)		DIMENSION (W x L x T) mm.	WEIGHT Grams	
						Peak	Average			
1	F7114-11	0.79-0.88	20	0.5	1.25	0 to +50	500	50	32 x 34 x 19	80
2	F7114-12	0.84-0.935	20	0.5	1.25	0 to +50	500	50	32 x 34 x 19	80
3	F7114-13	0.88-0.95	20	0.5	1.25	0 to +50	500	50	32 x 34 x 19	80
4	F7114-14	0.89-0.96	20	0.5	1.25	0 to +50	500	50	32 x 34 x 19	80
5	F7114-15	0.90-0.93	23	0.5	1.15	0 to +50	500	50	32 x 34 x 19	80
6	F7114-16	0.90-1.5	16	0.8	1.45	0 to +50	100	50	70 x 70 x 22	320
7	F7114-05	0.91-0.92	23	0.5	1.15	0 to +50	500	50	32 x 34 x 19	80
8	F7114-06	0.91-1.05	18	0.6	1.35	0 to +50	500	50	32 x 34 x 19	80
9	F7114-17	0.93-0.965	23	0.5	1.15	0 to +50	500	50	32 x 34 x 19	80
10	F7114-18	0.95-1.0	20	0.5	1.25	0 to +50	500	50	32 x 34 x 19	80
11	F7114-07	0.95-1.05	20	0.5	1.25	0 to +50	500	50	32 x 34 x 19	80
12	F7114-08	0.96-1.25	20	0.4	1.25	0 to +50	100	50	70 x 70 x 22	320
13	F7115-05	0.98-2.05	17	0.6	1.35	0 to +50	100	50	70 x 70 x 22	320
14	F7114-09	1.0-1.1	20	0.5	1.25	0 to +50	500	50	32 x 34 x 19	80
15	F7115-06	1.0-2.0	17	0.5	1.35	0 to +50	100	50	70 x 70 x 22	320
16	F7114-10	1.03-1.09	20	0.5	1.25	0 to +50	500	50	25 x 29 x 19	60
17	F7115-07	1.12-2.24	17	0.6	1.35	0 to +50	100	50	70 x 70 x 22	320
18	F7115-08	1.2-1.4	20	0.5	1.25	0 to +50	500	50	32 x 34 x 19	80
19	F7115-09	1.2-1.6	23	0.5	1.15	0 to +50	100	50	70 x 70 x 22	320
20	F7115-10	1.3-1.5	20	0.5	1.25	0 to +50	500	50	32 x 34 x 19	80
21	F7115-23	1.35-1.85	20	0.5	1.25	0 to +50	100	50	70 x 70 x 22	320
22	F7115-24	1.4-1.54	20	0.4	1.25	0 to +50	500	50	32 x 34 x 19	80
23	F7115-11	1.4-1.6	20	0.5	1.25	0 to +50	500	50	32 x 34 x 19	80
24	F7115-12	1.4-2.5	17	0.5	1.35	0 to +50	100	50	54 x 54 x 21	170
25	F7115-13	1.5-1.7	20	0.5	1.25	0 to +50	500	50	32 x 34 x 19	80
26	F7116-05	1.5-3.0	17	0.6	1.35	0 to +50	100	50	54 x 54 x 21	170
27	F7115-25	1.54-1.74	20	0.5	1.25	0 to +50	500	50	32 x 34 x 19	80
28	F7115-14	1.6-1.8	20	0.5	1.25	0 to +50	500	50	32 x 34 x 19	80
29	F7115-26	1.625-1.65	23	0.4	1.15	0 to +50	500	50	32 x 34 x 19	80
30	F7115-27	1.63-2.30	20	0.4	1.25	0 to +50	100	50	54 x 54 x 21	170
31	F7115-15	1.65-1.85	20	0.5	1.25	0 to +50	500	50	32 x 34 x 19	80
32	F7115-16	1.7-1.9	20	0.4	1.25	0 to +50	500	50	32 x 34 x 19	80
33	F7115-17	1.7-2.0	20	0.5	1.25	0 to +50	500	50	32 x 34 x 19	80
34	F7115-28	1.7-2.1	23	0.35	1.15	0 to +50	100	50	54 x 54 x 21	170
35	F7115-29	1.7-2.1	20	0.5	1.25	0 to +50	250	50	41 x 42 x 20	115
36	F7115-18	1.7-2.3	23	0.35	1.20	0 to +50	100	50	54 x 54 x 21	170
37	F7115-19	1.7-2.4	23	0.4	1.20	0 to +50	100	50	54 x 54 x 21	170
38	F7115-20	1.8-2.0	20	0.4	1.25	0 to +50	500	50	32 x 34 x 19	80
39	F7115-21	1.8-2.1	20	0.5	1.25	0 to +50	500	50	32 x 34 x 19	80
40	F7115-22	1.9-2.1	20	0.4	1.25	0 to +50	500	50	32 x 34 x 19	80
41	F7116-06	1.9-2.3	20	0.5	1.25	0 to +50	500	50	32 x 34 x 19	80
42	F7116-07	2.0-2.3	20	0.4	1.25	0 to +50	500	50	32 x 34 x 19	80
43	F7116-08	2.0-2.5	20	0.5	1.25	0 to +50	250	55	41 x 42 x 20	115
44	F7116-15	2.0-3.0	20	0.5	1.25	0 to +50	250	55	41 x 42 x 20	115
45	F7117-05	2.0-4.0	18	0.5	1.35	0 to +50	250	55	41 x 42 x 20	115
46	F7116-09	2.1-2.4	20	0.4	1.25	0 to +50	500	50	32 x 34 x 19	80
47	F7116-16	2.1-2.3	25	0.3	1.10	0 to +55	250	50	41 x 42 x 20	115
48	F7116-17	2.1-2.3	20	0.4	1.25	0 to +50	500	50	32 x 34 x 19	80
49	F7116-10	2.2-2.3	23	0.4	1.15	-54 to +85	250	50	32 x 34 x 19	65
50	F7116-18	2.2-2.3	20	0.4	1.25	0 to +50	250	55	25 x 25 x 13	45



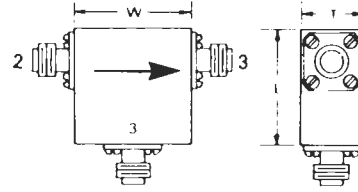
ISOLATORS



MODEL NO.	FREQUENCY GHz	ISOLATION dB (Min.)	INSERTION LOSS dB (Max.)	VSWR (Max.)	OPERATING TEMPERATURE °C	CIRCULATOR POWER (Watts)		DIMENSION (W x L x T) mm.	WEIGHT Grams	
						Peak	Average			
51	F7116-11	2.3 - 2.5	23	0.4	1.15	-54 to +85	250	25	32 x 34 x 19	65
52	F7116-19	2.3 - 2.5	20	0.4	1.25	0 to +55	250	25	25 x 25 x 13	45
53	F7116-12	2.5 - 2.9	20	0.4	1.25	0 to +55	250	25	32 x 34 x 19	65
54	F7116-20	2.5 - 2.9	20	0.4	1.25	0 to +55	250	25	25 x 25 x 13	45
55	F7116-13	2.5 - 3.3	20	0.4	1.25	0 to +55	250	25	32 x 34 x 19	65
56	F7116-21	2.5 - 3.3	20	0.4	1.25	0 to +55	250	25	25 x 25 x 13	45
57	F7116-06	2.5 - 3.6	20	0.4	1.25	0 to +55	250	25	32 x 34 x 19	65
58	F7117-07	2.6 - 3.4	20	0.4	1.25	0 to +55	250	25	32 x 34 x 19	65
59	F7117-08	2.6 - 5.2	18	0.5	1.35	0 to +55	250	25	32 x 34 x 19	65
60	F7116-14	2.7 - 3.1	20	0.4	1.25	0 to +55	250	25	32 x 34 x 19	65
61	F7116-22	2.7 - 3.1	20	0.4	1.25	0 to +55	250	25	25 x 25 x 13	45
62	F7118-05	2.7 - 5.4	17	0.5	1.35	0 to +55	250	25	32 x 34 x 19	65
63	F7117-09	2.8 - 3.5	20	0.4	1.25	0 to +55	250	25	32 x 34 x 19	65
64	F7117-13	3.0 - 4.0	20	0.4	1.25	0 to +55	250	25	32 x 34 x 19	65
65	F7117-10	3.2 - 4.0	20	0.4	1.25	0 to +55	250	25	32 x 34 x 19	65
66	F7117-11	3.4 - 4.2	23	0.4	1.15	0 to +55	250	25	25 x 29 x 18	50
67	F7117-14	3.45 - 4.45	22	0.4	1.15	0 to +55	250	25	25 x 29 x 18	50
68	F7117-15	3.5 - 4.2	23	0.4	1.15	0 to +55	250	25	25 x 29 x 18	50
69	F7118-06	3.6 - 6.5	20	0.4	1.25	0 to +55	250	25	25 x 29 x 18	50
70	F7117-16	3.625 - 4.2	25	0.3	1.12	-54 to +85	250	25	25 x 29 x 18	50
71	F7117-12	3.7 - 4.2	25	0.3	1.12	-54 to +85	250	25	25 x 29 x 18	50
72	F7118-07	4.0 - 4.6	20	0.4	1.25	-54 to +85	250	25	25 x 29 x 18	50
73	F7118-08	4.0 - 5.0	20	0.4	1.25	-54 to +85	250	25	25 x 29 x 18	50
74	F7118-09	4.0 - 6.0	20	0.4	1.25	-54 to +85	250	25	25 x 29 x 18	50
75	F7119-05	4.0 - 8.0	20	0.5	1.25	0 to +55	250	25	25 x 29 x 18	50
76	F7118-10	4.2 - 4.5	25	0.4	1.13	-54 to +85	250	25	25 x 29 x 18	50
77	F7118-11	4.3 - 5.5	25	0.4	1.13	-54 to +85	250	25	25 x 29 x 18	50
78	F7118-16	4.4 - 5.0	20	0.4	1.25	-54 to +85	250	25	21 x 21 x 13	35
79	F7118-12	4.4 - 5.5	25	0.4	1.13	-54 to +85	250	25	25 x 29 x 18	50
80	F7118-13	4.4 - 6.5	20	0.4	1.25	-54 to +85	250	25	25 x 29 x 18	50
81	F7119-06	4.8 - 9.6	17	0.6	1.40	0 to +55	250	25	25 x 29 x 18	50
82	F7118-14	5.0 - 6.0	23	0.4	1.15	-54 to +85	250	25	25 x 29 x 18	50
83	F7119-07	5.0 - 7.0	20	0.4	1.25	-54 to +85	250	25	25 x 29 x 18	50
84	F7119-17	5.2 - 10.4	17	0.6	1.40	0 to +55	250	25	19 x 24 x 17	34
85	F7118-15	5.3 - 6.0	23	0.4	1.15	-54 to +85	250	25	25 x 29 x 18	50
86	F7119-08	5.7 - 6.8	20	0.4	1.25	-54 to +85	250	25	25 x 29 x 17	50
87	F7119-09	5.8 - 6.5	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	34
88	F7119-10	5.8 - 8.6	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	34
89	F7119-11	6.0 - 8.0	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	34
90	F7119-12	6.0 - 9.0	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	34
91	F7119-18	6.4 - 7.2	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	34
92	F7119-13	6.55 - 7.85	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	34
93	F7119-14	7.0 - 8.5	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	34
94	F7120-05	7.0 - 9.0	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	34
95	F7120-06	7.0 - 11.0	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	34
96	F7119-15	7.1 - 7.8	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	34
97	F7119-16	7.1 - 8.5	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	34
98	F7119-19	7.25 - 7.75	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	34
99	F7120-07	7.5 - 9.0	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	34
100	F7120-23	7.9 - 8.4	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	34

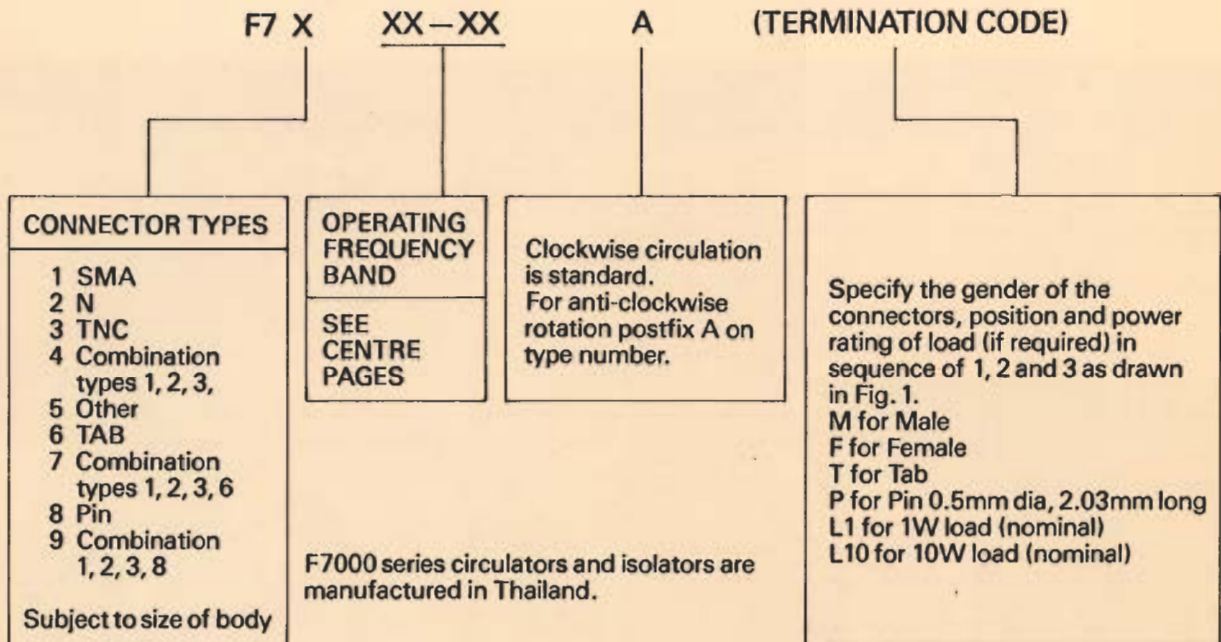


CIRCULATORS



MODEL NO.	FREQUENCY GHz	ISOLATION dB (Min.)	INSERTION LOSS dB (Max.)	VSWR (Max.)	OPERATING TEMPERATURE °C	CIRCULATOR POWER (Watts)		DIMENSION (W x L x T) mm.	WEIGHT Grams	
						Peak	Average			
101	F7120-08	8.0 - 11.0	20	0.5	1.25	-54 to +85	250	25	16 x 21 x 17	26
102	F7120-09	8.0 - 12.0	20	0.5	1.25	-54 to +85	250	25	16 x 21 x 17	26
103	F7120-10	8.0 - 12.4	20	0.5	1.25	-54 to +85	250	25	16 x 21 x 17	26
104	F7120-11	8.0 - 16.0	17	0.7	1.35	-54 to +85	250	25	16 x 21 x 17	26
105	F7121-05	8.0 - 18.0	15	0.9	1.50	-54 to +85	250	25	16 x 21 x 17	26
106	F7120-12	8.4 - 9.7	23	0.5	1.15	-54 to +85	250	25	16 x 21 x 17	26
107	F7120-13	8.4 - 10.0	23	0.5	1.15	-54 to +85	250	25	16 x 21 x 17	26
108	F7120-14	9.0 - 10.0	23	0.5	1.15	-54 to +85	250	25	16 x 21 x 17	26
109	F7120-15	9.0 - 12.0	20	0.5	1.25	-54 to +85	250	25	16 x 21 x 17	26
110	F7121-06	9.0 - 17.0	18	0.7	1.30	-54 to +85	250	25	16 x 21 x 17	26
111	F7121-07	9.0 - 18.0	17	0.8	1.35	-54 to +85	250	25	16 x 21 x 17	26
112	F7120-24	9.5 - 10.5	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	19
113	F7120-16	9.5 - 12.4	23	0.5	1.20	-54 to +85	250	25	16 x 21 x 17	26
114	F7120-17	9.6 - 10.2	23	0.5	1.20	-54 to +85	250	25	16 x 21 x 17	26
115	F7120-25	9.6 - 10.2	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	19
116	F7120-18	9.7 - 12.0	20	0.5	1.25	-54 to +85	250	25	16 x 21 x 17	26
117	F7120-19	10.0 - 12.0	23	0.5	1.20	-54 to +85	250	25	16 x 21 x 17	26
118	F7121-08	10.0 - 18.0	18	0.7	1.30	-54 to +85	250	25	16 x 21 x 17	26
119	F7120-20	10.2 - 12.4	23	0.5	1.20	-54 to +85	250	25	16 x 21 x 17	26
120	F7120-26	10.5 - 11.5	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	19
121	F7120-21	10.7 - 11.7	23	0.5	1.20	-54 to +85	250	25	16 x 21 x 17	26
122	F7120-27	10.7 - 11.7	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	19
123	F7121-09	11.0 - 14.0	20	0.5	1.25	-54 to +85	250	25	16 x 21 x 17	26
124	F7121-10	11.0 - 18.0	18	0.7	1.30	-54 to +85	250	25	16 x 21 x 17	26
125	F7120-22	11.7 - 12.7	23	0.5	1.20	-54 to +85	250	25	16 x 21 x 17	26
126	F7120-28	11.7 - 12.7	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	19
127	F7121-11	12.0 - 14.0	20	0.5	1.25	-54 to +85	250	25	16 x 21 x 17	26
128	F7121-12	12.2 - 13.2	23	0.5	1.20	-54 to +85	250	25	16 x 21 x 17	26
129	F7121-27	12.2 - 13.2	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	19
130	F7121-13	12.4 - 15.0	20	0.5	1.25	-54 to +85	250	25	16 x 21 x 17	26
131	F7121-14	12.4 - 18.0	18	0.6	1.35	-54 to +85	250	25	16 x 21 x 17	26
132	F7121-15	12.5 - 13.5	23	0.5	1.20	-54 to +85	250	25	16 x 21 x 17	26
133	F7121-28	12.5 - 13.5	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	19
134	F7121-16	12.6 - 13.2	23	0.5	1.20	-54 to +85	250	25	16 x 21 x 17	26
135	F7121-29	12.6 - 13.2	25	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	19
136	F7121-17	12.7 - 13.3	23	0.5	1.20	-54 to +85	250	25	16 x 21 x 17	26
137	F7121-30	12.7 - 13.3	25	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	19
138	F7121-18	13.0 - 16.0	20	0.5	1.25	-54 to +85	250	25	16 x 21 x 17	26
139	F7121-19	14.0 - 16.0	20	0.5	1.25	-54 to +85	250	25	16 x 21 x 17	26
140	F7121-31	14.0 - 14.5	25	0.4	1.10	-54 to +85	250	25	13 x 16 x 13	19
141	F7121-20	14.0 - 16.5	20	0.5	1.25	-54 to +85	250	25	16 x 21 x 17	26
142	F7121-21	14.1 - 15.3	23	0.5	1.20	-54 to +85	250	25	16 x 21 x 17	26
143	F7121-32	14.1 - 15.3	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	19
144	F7121-33	14.25 - 16.25	20	0.5	1.25	-54 to +85	250	25	16 x 21 x 17	26
145	F7121-22	14.4 - 15.5	23	0.5	1.20	-54 to +85	250	25	16 x 21 x 17	26
146	F7121-34	14.4 - 15.5	25	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	19
147	F7121-23	15.0 - 18.0	20	0.6	1.25	-54 to +85	250	25	16 x 21 x 17	26
148	F7121-24	15.5 - 16.6	23	0.5	1.20	-54 to +85	250	25	16 x 21 x 17	26
149	F7121-25	16.0 - 18.0	20	0.6	1.25	-54 to +85	250	25	16 x 21 x 17	26
150	F7121-26	17.3 - 18.1	20	0.6	1.25	-54 to +85	250	25	16 x 21 x 17	26

TYPE NUMBER DESCRIPTION



MECHANICAL OUTLINES

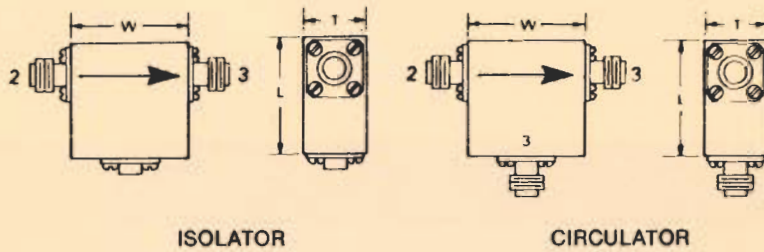


Fig. 1 STANDARD 3-PORT CONFIGURATION

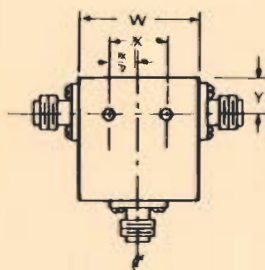


Fig. 2

MOUNTING HOLES

W mm	X mm	Y mm	Internal Threads
70	50	10	M3-0.5-6H
54	40	10	M3-0.5-6H
41	25	6.5	M3-0.5-6H
32	24	6.5	M3-0.5-6H
25	19	6.5	M2-0.4-6H
19	11	6.5	M2-0.4-6H
16	10	6.6	M2-0.4-6H

All thread depths are 4mm

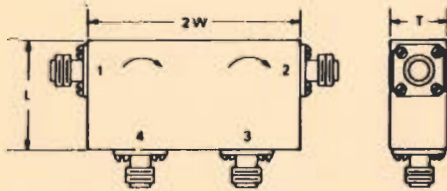


Fig. 3 4-PORT 'T' CONFIGURATION

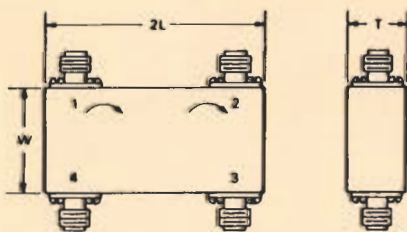


Fig. 4 4-PORT 'H' CONFIGURATION

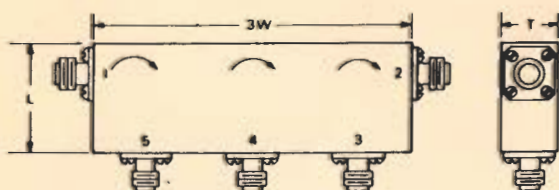


Fig. 5 5-PORT CONFIGURATION

If you do not see a device that fits your requirements let us quote you against your procurement drawing.