

Directional Coupler

TCD-18-4-75+

Typical Performance Data

TEST CONDITIONS: INPUT POWER =0 dBm @Temperature = +25°C

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING LOSS (dB)	DIRECTIVITY (dB)	RETURN LOSS		
				IN	OUT	CPL
10	0.75	17.89	32.71	21.43	23.65	21.29
15	0.75	17.89	32.47	21.61	23.96	21.50
20	0.75	17.89	32.10	21.71	24.13	21.62
25	0.76	17.90	31.62	21.74	24.16	21.66
50	0.77	17.93	31.66	21.84	24.20	21.73
75	0.78	17.94	31.61	21.89	24.29	21.83
100	0.79	17.95	31.43	21.88	24.39	21.96
125	0.79	17.96	31.94	21.97	24.46	22.07
150	0.80	17.96	31.87	21.86	24.47	22.22
175	0.80	17.97	31.83	21.92	24.50	22.42
200	0.80	17.97	31.58	21.91	24.47	22.62
250	0.81	17.97	31.01	21.81	24.34	23.02
300	0.81	17.98	30.62	21.56	24.08	23.48
350	0.82	17.98	29.03	21.33	23.79	24.02
400	0.83	17.97	27.95	21.25	23.52	24.53
425	0.83	17.98	27.16	21.09	23.34	24.83
450	0.83	17.98	26.36	21.28	23.24	25.10
475	0.84	17.97	26.06	21.04	23.12	25.40
500	0.85	17.98	24.81	21.08	23.03	25.66
550	0.86	17.97	23.54	20.86	22.80	26.17
575	0.87	17.97	23.45	21.10	22.79	26.34
600	0.88	17.99	22.23	21.01	22.74	26.54
650	0.89	17.99	21.34	21.39	22.76	26.73
700	0.91	17.99	20.63	21.60	22.86	26.76
750	0.92	17.99	19.98	21.60	23.03	26.61
800	0.94	18.00	19.30	22.26	23.38	26.35
850	0.94	18.00	18.59	23.16	23.84	25.93
900	0.95	18.01	17.93	23.92	24.49	25.47
950	0.96	18.00	17.48	24.37	25.13	25.00
975	0.96	17.98	17.61	25.31	25.67	24.82
1000	0.97	17.98	17.49	25.47	26.09	24.60
1050	0.98	17.97	17.30	26.66	27.17	24.20
1075	0.97	17.98	16.49	27.36	27.69	24.04
1100	0.98	17.98	16.71	28.47	28.32	23.88
1200	1.00	17.90	15.70	30.76	31.60	23.45
1300	1.04	17.86	14.04	33.42	34.78	23.25
1400	1.08	17.73	12.30	34.52	34.76	23.40
1500	1.13	17.51	11.11	31.04	31.78	23.56
1600	1.16	17.28	9.26	31.21	30.17	23.88
1700	1.18	17.05	8.41	29.19	28.65	23.99
1800	1.19	16.87	7.47	30.63	28.35	23.97
1900	1.24	16.71	7.19	29.80	28.30	23.54
2000	1.28	16.65	6.98	31.57	29.13	22.77
2100	1.37	16.57	7.24	31.76	30.18	21.82
2200	1.44	16.51	8.07	33.89	31.84	20.57
2300	1.53	16.42	8.61	31.74	32.54	19.54
2400	1.61	16.32	8.72	30.54	33.47	18.45
2500	1.72	16.09	7.94	27.42	32.46	17.52
2600	1.81	15.85	7.17	26.45	33.04	16.81
2700	1.96	15.34	5.27	25.89	33.75	16.35
2800	2.11	14.90	4.59	25.99	36.20	16.01
2900	2.23	14.80	4.03	25.87	36.98	15.93
3000	2.31	14.87	3.29	25.26	39.22	16.14

REV. X1

TCD-18-4-75+

081006

Page 1 of 3



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS9100 CERTIFIED RoHS compliant

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661



The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see



Directional Coupler

TCD-18-4-75+

Typical Performance Data

TEST CONDITIONS: INPUT POWER =0 dBm @Temperature = -40°C

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING LOSS (dB)	DIRECTIVITY (dB)	RETURN LOSS		
				IN	(dB) OUT	CPL
10	0.76	17.64	26.91	19.83	20.93	19.64
15	0.70	17.55	31.10	21.53	22.87	21.39
20	0.65	17.50	34.73	22.81	24.30	22.71
25	0.64	17.49	37.81	23.66	25.20	23.61
50	0.61	17.50	42.81	26.25	27.01	26.07
75	0.60	17.51	40.30	26.51	27.91	26.26
100	0.60	17.51	38.31	25.20	28.53	25.04
125	0.61	17.52	34.97	24.40	28.83	24.53
150	0.61	17.51	33.96	24.32	28.79	25.14
175	0.61	17.52	32.28	24.98	28.68	26.11
200	0.62	17.52	31.31	24.87	28.44	25.93
250	0.63	17.51	29.14	23.03	27.48	24.45
300	0.64	17.51	27.87	22.66	26.12	25.03
350	0.64	17.51	26.45	21.83	24.85	24.70
400	0.65	17.49	25.47	21.12	23.78	24.59
425	0.66	17.49	24.83	20.86	23.29	24.63
450	0.66	17.49	24.33	20.88	22.95	24.46
475	0.67	17.48	24.00	20.32	22.59	24.33
500	0.67	17.49	23.01	20.13	22.31	24.44
550	0.68	17.47	22.35	19.75	21.88	24.57
575	0.69	17.46	22.28	19.80	21.77	24.16
600	0.70	17.47	21.34	19.55	21.62	23.83
650	0.71	17.47	20.72	19.96	21.48	23.91
700	0.73	17.44	20.51	20.11	21.46	23.57
750	0.74	17.41	20.13	20.29	21.53	23.16
800	0.74	17.40	19.72	21.79	21.91	23.24
850	0.75	17.37	19.34	22.99	22.55	22.83
900	0.76	17.35	19.05	24.70	23.57	22.89
950	0.77	17.32	19.12	26.79	24.83	22.85
975	0.78	17.28	20.36	29.51	25.97	22.81
1000	0.78	17.31	19.31	29.75	26.42	22.77
1050	0.78	17.26	20.02	35.27	28.85	23.01
1075	0.78	17.26	19.19	38.43	30.02	23.02
1100	0.78	17.23	19.94	37.26	31.72	23.23
1200	0.81	17.15	19.23	28.60	36.59	25.41
1300	0.87	17.11	16.95	23.46	30.79	29.50
1400	0.92	16.99	14.29	22.93	27.93	32.92
1500	0.96	16.78	12.54	22.66	26.52	29.80
1600	0.98	16.54	10.35	26.60	26.50	24.06
1700	0.97	16.32	9.30	30.32	26.31	20.03
1800	0.97	16.15	8.27	29.98	26.07	18.16
1900	1.03	15.99	8.00	25.19	25.86	17.11
2000	1.11	15.96	8.05	20.30	25.89	17.56
2100	1.20	15.93	8.32	19.36	27.18	19.55
2200	1.29	15.90	9.52	17.91	28.65	21.03
2300	1.34	15.84	10.15	17.93	28.15	28.91
2400	1.43	15.75	10.05	16.77	26.08	26.98
2500	1.59	15.51	8.62	17.03	24.30	19.95
2600	1.73	15.23	7.50	16.11	24.72	15.08
2700	1.85	14.73	5.36	15.83	27.01	12.59
2800	1.96	14.31	4.38	15.20	33.34	11.06
2900	2.03	14.22	3.98	14.67	39.08	10.24
3000	2.11	14.42	3.20	14.85	29.73	9.97

REV. X1

TCD-18-4-75+

081006

Page 2 of 3



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS9100 CERTIFIED RoHS compliant

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661



Patent Pending

The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see



Directional Coupler

TCD-18-4-75+

Typical Performance Data

TEST CONDITIONS: INPUT POWER =0 dBm @Temperature = +85°C

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING LOSS (dB)	DIRECTIVITY (dB)	RETURN LOSS		
				IN	(dB) OUT	CPL
10	1.00	18.37	25.82	19.40	21.26	19.27
15	1.01	18.38	26.04	19.38	21.37	19.27
20	1.01	18.39	26.19	19.31	21.43	19.21
25	1.02	18.39	26.26	19.19	21.44	19.10
50	1.03	18.40	26.40	18.69	21.43	18.57
75	1.04	18.42	26.74	18.66	21.45	18.64
100	1.04	18.43	27.24	19.21	21.45	19.32
125	1.04	18.43	28.15	19.97	21.49	20.00
150	1.04	18.43	28.87	19.99	21.60	20.15
175	1.03	18.43	30.34	19.83	21.76	20.04
200	1.03	18.43	31.15	19.76	21.90	20.28
250	1.03	18.44	33.01	20.59	22.14	21.63
300	1.04	18.46	35.24	20.72	22.43	22.20
350	1.04	18.48	34.32	20.61	22.69	23.00
400	1.05	18.50	31.71	21.27	22.98	24.35
425	1.05	18.52	30.14	21.30	23.06	24.83
450	1.06	18.54	28.51	21.63	23.22	25.30
475	1.06	18.55	27.51	21.38	23.28	25.75
500	1.07	18.58	25.57	21.58	23.38	26.37
550	1.08	18.61	23.77	21.66	23.46	27.71
575	1.08	18.63	23.21	22.07	23.59	28.23
600	1.09	18.66	21.60	21.84	23.59	28.55
650	1.10	18.71	20.26	22.02	23.65	29.16
700	1.11	18.75	19.20	22.06	23.67	29.66
750	1.12	18.77	18.19	21.66	23.65	29.47
800	1.13	18.81	17.35	21.69	23.68	28.74
850	1.14	18.84	16.62	22.00	23.84	28.17
900	1.14	18.86	15.86	22.14	24.11	27.22
950	1.15	18.85	15.34	22.03	24.27	25.89
975	1.21	18.94	15.43	22.56	24.96	25.45
1000	1.16	18.89	14.93	22.31	24.52	24.98
1050	1.16	18.86	14.90	22.81	25.09	23.96
1075	1.16	18.88	14.16	23.11	25.26	23.48
1100	1.17	18.86	14.42	24.06	25.74	23.08
1200	1.19	18.79	13.57	25.74	27.57	22.01
1300	1.22	18.73	12.40	31.91	30.93	21.52
1400	1.27	18.58	11.15	44.67	34.46	21.77
1500	1.32	18.36	10.25	31.14	33.79	22.87
1600	1.36	18.12	8.71	26.93	30.12	25.25
1700	1.39	17.91	7.99	23.60	27.24	29.35
1800	1.40	17.73	7.10	22.76	25.80	31.15
1900	1.44	17.57	6.87	21.64	25.00	25.94
2000	1.48	17.49	6.77	22.65	25.20	21.72
2100	1.54	17.44	6.88	22.29	25.97	19.19
2200	1.59	17.38	7.71	24.38	27.49	17.68
2300	1.69	17.29	8.23	24.66	29.34	16.81
2400	1.77	17.21	8.38	28.12	32.27	16.63
2500	1.89	17.01	7.69	29.76	33.80	16.94
2600	1.98	16.81	6.98	33.80	35.30	17.64
2700	2.11	16.28	5.17	32.06	33.55	18.62
2800	2.26	15.83	4.57	26.05	31.78	19.22
2900	2.38	15.66	4.01	23.57	28.86	19.00
3000	2.42	15.68	3.27	20.23	26.78	18.16

REV. X1

TCD-18-4-75+

081006

Page 3 of 3



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS9100 CERTIFIED RoHS compliant

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661



The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see

