

Directional Coupler

D17I+

Typical Performance Data

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

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING LOSS (dB)	DIRECTIVITY (dB)	RETURN LOSS (dB)		
				IN	OUT	CPL
10	0.07	64.60	16.50	42.14	42.24	33.62
25	0.08	57.47	15.94	41.07	41.22	33.50
50	0.09	51.27	15.58	39.92	39.80	33.33
100	0.10	45.16	15.19	37.85	37.99	33.02
250	0.13	37.30	15.24	35.86	35.78	32.65
500	0.17	31.36	15.23	34.22	34.28	33.59
750	0.19	27.89	15.32	33.56	33.76	35.52
1000	0.21	25.48	15.53	33.60	34.25	36.54
1250	0.24	23.64	15.93	34.56	35.42	34.19
1500	0.26	22.16	16.44	36.48	38.33	30.58
1600	0.27	21.63	16.69	37.27	40.12	29.21
1700	0.29	21.16	16.91	37.77	42.51	28.06
1800	0.30	20.71	17.16	37.98	45.70	26.79
1900	0.30	20.28	17.39	37.83	49.32	25.83
2000	0.31	19.89	17.66	37.49	55.18	24.85
2100	0.33	19.52	17.86	37.13	62.06	23.91
2150	0.33	19.34	17.96	36.78	67.90	23.47
2200	0.33	19.17	18.00	36.71	68.37	23.10
2225	0.34	19.09	18.05	36.55	65.25	22.91
2250	0.34	19.01	18.09	36.48	60.40	22.68
2275	0.34	18.92	18.13	36.37	61.54	22.48
2300	0.35	18.85	18.13	36.12	60.70	22.28
2325	0.35	18.77	18.16	36.01	57.08	22.08
2350	0.35	18.69	18.19	35.99	56.79	21.88
2375	0.35	18.61	18.24	35.82	55.62	21.69
2400	0.36	18.53	18.22	35.63	55.01	21.47
2450	0.36	18.39	18.23	35.55	53.14	21.10
2500	0.37	18.24	18.21	35.36	51.22	20.79
2525	0.37	18.17	18.16	35.20	50.55	20.64
2550	0.38	18.10	18.14	35.10	49.33	20.47
2575	0.37	18.03	18.12	35.07	48.95	20.29
2600	0.38	17.96	18.10	34.84	47.23	20.07
2625	0.38	17.89	18.04	34.87	46.76	19.86
2650	0.38	17.83	17.99	34.69	45.58	19.64
2675	0.39	17.76	17.98	34.60	45.06	19.49
2700	0.39	17.69	17.92	34.64	44.77	19.35
2750	0.39	17.57	17.73	34.13	43.51	19.09
2800	0.40	17.44	17.59	34.12	42.38	18.76
2900	0.41	17.21	17.18	33.43	41.05	18.06
3000	0.43	16.98	16.76	32.65	39.23	17.44
3100	0.44	16.77	16.25	32.08	37.95	16.88
3200	0.45	16.57	15.71	31.20	36.47	16.25
3300	0.46	16.38	15.14	30.34	35.09	15.66
3400	0.47	16.19	14.62	29.54	34.03	15.15
3500	0.49	16.03	14.04	28.79	33.06	14.54
3750	0.51	15.63	12.64	27.00	30.69	13.25
4000	0.54	15.29	11.34	25.77	28.58	12.05
4500	0.59	14.72	9.29	25.06	27.47	10.05
5000	0.64	14.21	7.82	28.27	31.62	8.56
5500	0.70	13.74	6.80	36.66	27.94	7.52
6000	0.81	13.27	6.28	21.98	19.09	6.78
6500	1.01	12.95	5.99	15.46	13.96	6.21
7000	1.41	13.03	6.16	10.94	10.12	5.70

REV. X1
D17I+
090317

Page 1 of 3



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 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

D171+

Typical Performance Data

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

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING LOSS (dB)	DIRECTIVITY (dB)	RETURN LOSS (dB)		
				IN	OUT	CPL
10	0.05	65.46	17.36	45.43	44.89	34.42
25	0.06	57.55	15.22	45.98	42.71	33.81
50	0.06	51.41	16.11	46.37	39.79	32.72
100	0.08	45.26	15.74	38.93	38.60	32.64
250	0.09	37.32	15.74	35.05	35.64	32.62
500	0.11	31.37	15.58	33.34	33.64	33.36
750	0.12	27.89	15.65	32.36	32.58	35.04
1000	0.13	25.45	15.77	31.95	32.58	35.03
1250	0.14	23.60	16.11	32.68	33.14	32.44
1500	0.15	22.10	16.57	35.06	35.64	29.41
1600	0.15	21.57	16.82	36.14	37.43	28.42
1700	0.17	21.08	17.09	36.67	40.01	26.88
1800	0.17	20.62	17.34	36.82	42.29	26.14
1900	0.17	20.21	17.51	39.12	42.36	24.96
2000	0.18	19.80	17.72	37.38	44.87	24.12
2100	0.18	19.43	17.93	38.63	54.60	23.39
2150	0.19	19.24	18.04	37.75	49.23	22.87
2200	0.19	19.07	18.12	36.70	47.03	22.45
2225	0.19	18.98	18.16	36.63	46.53	22.27
2250	0.19	18.90	18.18	37.08	47.02	22.09
2275	0.19	18.82	18.21	37.65	49.55	21.93
2300	0.20	18.74	18.22	37.87	52.48	21.72
2325	0.20	18.66	18.25	37.74	51.02	21.51
2350	0.20	18.58	18.26	37.41	48.67	21.32
2375	0.20	18.50	18.33	36.76	46.13	21.16
2400	0.20	18.42	18.31	36.30	44.67	21.01
2450	0.21	18.27	18.32	37.11	44.96	20.66
2500	0.21	18.12	18.36	38.07	48.71	20.35
2525	0.21	18.05	18.37	37.42	48.29	20.24
2550	0.21	17.98	18.31	36.79	45.89	20.10
2575	0.21	17.90	18.30	36.37	44.31	19.89
2600	0.21	17.84	18.29	36.11	43.37	19.58
2625	0.22	17.77	18.14	36.08	42.89	19.27
2650	0.22	17.71	18.10	35.43	41.00	18.99
2675	0.22	17.64	18.07	34.80	39.29	18.82
2700	0.22	17.57	17.95	34.28	38.26	18.73
2750	0.22	17.44	17.83	33.99	38.24	18.64
2800	0.23	17.31	17.58	34.65	38.66	18.38
2900	0.24	17.07	17.13	34.28	38.05	17.43
3000	0.24	16.84	16.74	33.74	37.28	16.82
3100	0.25	16.62	16.23	35.46	41.27	16.20
3200	0.26	16.42	15.63	33.22	36.94	15.66
3300	0.27	16.24	15.01	30.34	32.69	14.95
3400	0.27	16.04	14.41	29.27	31.99	14.60
3500	0.28	15.88	13.82	27.80	30.02	13.93
3750	0.30	15.47	12.45	26.61	29.30	12.79
4000	0.31	15.11	11.17	25.61	28.25	11.77
4500	0.35	14.51	9.05	24.08	26.35	9.83
5000	0.38	13.94	7.70	27.03	30.89	8.43
5500	0.41	13.44	6.63	35.51	29.24	7.21
6000	0.50	12.98	6.21	21.45	18.56	6.16
6500	0.67	12.73	5.82	15.60	13.95	5.42
7000	1.02	12.70	6.03	10.84	9.69	4.95

REV. X1
D171+
090317
Page 2 of 3



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 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

D171+

Typical Performance Data

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

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING LOSS (dB)	DIRECTIVITY (dB)	RETURN LOSS (dB)		
				IN	OUT	CPL
10	0.08	65.42	15.25	40.26	40.62	33.04
25	0.09	57.54	15.23	38.60	40.00	33.25
50	0.10	51.11	15.41	37.25	39.66	33.82
100	0.12	45.13	14.93	37.38	38.19	33.44
250	0.16	37.28	14.90	36.20	35.70	32.73
500	0.20	31.32	14.95	34.61	34.64	33.68
750	0.23	27.88	15.08	34.35	34.64	35.95
1000	0.27	25.48	15.32	35.14	35.30	38.05
1250	0.30	23.65	15.73	36.07	36.71	35.76
1500	0.33	22.18	16.28	37.25	38.58	31.77
1600	0.34	21.67	16.54	37.81	39.81	30.31
1700	0.36	21.19	16.76	38.17	41.57	29.03
1800	0.37	20.74	17.03	38.46	42.00	27.63
1900	0.39	20.33	17.24	37.24	44.08	26.59
2000	0.40	19.94	17.47	36.92	45.64	25.52
2100	0.42	19.57	17.68	35.96	47.02	24.41
2150	0.42	19.40	17.74	35.75	48.15	24.04
2200	0.43	19.23	17.79	35.84	46.53	23.63
2225	0.43	19.15	17.84	35.64	46.73	23.40
2250	0.44	19.07	17.87	35.35	47.19	23.16
2275	0.44	18.99	17.89	35.05	47.21	22.95
2300	0.45	18.90	17.94	34.76	47.82	22.75
2325	0.45	18.83	17.94	34.71	48.23	22.51
2350	0.45	18.75	17.94	34.76	47.14	22.31
2375	0.45	18.68	17.96	34.62	47.21	22.07
2400	0.46	18.60	17.95	34.42	46.42	21.85
2450	0.46	18.45	17.93	34.24	44.90	21.49
2500	0.48	18.31	17.94	33.85	44.90	21.19
2525	0.48	18.24	17.92	33.59	44.37	21.01
2550	0.48	18.17	17.87	33.47	43.50	20.81
2575	0.48	18.11	17.85	33.38	43.55	20.61
2600	0.49	18.04	17.87	33.13	43.08	20.38
2625	0.49	17.97	17.78	33.15	43.16	20.17
2650	0.50	17.91	17.75	33.04	42.49	19.96
2675	0.50	17.84	17.73	32.94	42.62	19.79
2700	0.50	17.78	17.64	33.04	42.70	19.66
2750	0.51	17.65	17.53	32.37	40.83	19.38
2800	0.52	17.53	17.40	32.26	40.68	19.02
2900	0.53	17.30	17.03	31.59	38.61	18.31
3000	0.55	17.07	16.67	30.77	37.34	17.68
3100	0.56	16.86	16.15	30.29	35.96	17.15
3200	0.58	16.67	15.65	29.57	35.17	16.47
3300	0.59	16.47	15.17	29.59	35.83	15.92
3400	0.60	16.29	14.69	29.42	35.73	15.33
3500	0.62	16.12	14.17	29.00	35.65	14.75
3750	0.65	15.74	12.85	27.79	33.07	13.43
4000	0.69	15.40	11.52	27.17	31.08	12.23
4500	0.76	14.83	9.55	27.78	31.04	10.22
5000	0.83	14.37	7.99	31.70	35.50	8.74
5500	0.91	13.93	6.92	37.63	27.31	7.76
6000	1.03	13.50	6.30	22.68	19.72	7.19
6500	1.25	13.19	6.00	15.72	14.29	6.77
7000	1.66	13.25	6.29	10.88	10.28	6.34

REV. X1
D171+
090317
Page 3 of 3



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 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

