

# Directional Coupler

# D19GA+

## 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
900	0.14	25.26	19.01	30.56	31.41	23.52
950	0.14	24.80	18.91	30.27	31.11	23.20
1000	0.14	24.36	18.86	30.16	31.02	22.83
1050	0.14	23.94	18.74	29.93	30.82	22.71
1100	0.15	23.55	18.68	29.81	30.78	22.63
1150	0.15	23.18	18.61	29.76	30.66	22.31
1200	0.15	22.82	18.50	29.67	30.61	21.87
1250	0.16	22.47	18.45	29.53	30.51	21.55
1300	0.16	22.14	18.43	29.50	30.42	21.31
1350	0.16	21.82	18.30	29.47	30.36	21.06
1400	0.16	21.52	18.20	29.36	30.14	20.81
1450	0.17	21.23	18.12	29.25	30.07	20.56
1500	0.17	20.94	18.07	29.16	30.09	20.28
1550	0.18	20.67	17.95	29.00	29.86	20.10
1600	0.18	20.41	17.84	28.88	29.68	20.02
1650	0.18	20.15	17.75	28.79	29.58	19.86
1700	0.19	19.91	17.63	28.61	29.36	19.56
1750	0.19	19.68	17.47	28.37	29.00	19.33
1800	0.20	19.44	17.35	28.21	28.92	19.18
1850	0.20	19.22	17.26	28.02	28.72	18.98
1900	0.20	19.00	17.12	27.85	28.52	18.72
1950	0.21	18.79	16.95	27.62	28.25	18.51
2000	0.21	18.58	16.80	27.33	28.02	18.33
2025	0.21	18.49	16.69	27.25	27.94	18.19
2050	0.22	18.39	16.64	27.16	27.84	18.12
2075	0.22	18.30	16.51	26.99	27.63	18.06
2100	0.22	18.19	16.43	26.95	27.55	17.93

# Directional Coupler

# D19GA+

## Typical Performance Data

TEST CONDITIONS: INPUT POWER =0 dBm @Temperature = -45 °C

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING LOSS (dB)	DIRECTIVITY (dB)	RETURN LOSS (dB)		
				In	Out	Cpl
900	0.08	25.26	20.12	29.30	30.01	20.92
950	0.09	24.78	19.97	29.03	29.79	20.59
1000	0.09	24.35	19.83	28.82	29.65	20.30
1050	0.09	23.93	19.62	28.48	29.33	20.21
1100	0.09	23.54	19.38	28.25	29.17	20.14
1150	0.09	23.16	19.25	28.17	28.99	19.88
1200	0.09	22.79	19.00	28.14	28.95	19.54
1250	0.09	22.45	18.85	28.09	28.95	19.29
1300	0.09	22.12	18.70	28.13	28.91	19.06
1350	0.09	21.80	18.52	28.18	28.92	18.84
1400	0.09	21.49	18.33	28.13	28.82	18.63
1450	0.09	21.19	18.17	28.12	28.80	18.41
1500	0.10	20.91	18.07	28.10	28.91	18.17
1550	0.10	20.64	17.87	28.02	28.76	18.02
1600	0.10	20.37	17.72	27.93	28.62	17.96
1650	0.10	20.11	17.56	27.83	28.49	17.84
1700	0.11	19.86	17.37	27.58	28.21	17.58
1750	0.11	19.63	17.13	27.23	27.75	17.37
1800	0.11	19.40	16.98	26.96	27.55	17.25
1850	0.11	19.17	16.77	26.75	27.30	17.09
1900	0.11	18.94	16.64	26.62	27.18	16.88
1950	0.12	18.73	16.45	26.54	27.06	16.70
2000	0.12	18.52	16.24	26.49	27.06	16.56
2025	0.12	18.42	16.14	26.52	27.12	16.46
2050	0.12	18.32	16.07	26.56	27.15	16.41
2075	0.12	18.22	15.96	26.49	27.05	16.35
2100	0.12	18.12	15.86	26.58	27.10	16.25

# Directional Coupler

# D19GA+

## 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
900	0.17	25.25	18.30	31.60	32.74	25.90
950	0.17	24.78	18.20	31.30	32.36	25.46
1000	0.17	24.35	18.14	31.20	32.26	25.01
1050	0.18	23.94	18.10	30.91	31.94	24.87
1100	0.18	23.54	18.11	30.76	31.81	24.80
1150	0.19	23.17	18.11	30.64	31.58	24.41
1200	0.19	22.81	18.09	30.51	31.44	23.83
1250	0.19	22.47	18.11	30.30	31.30	23.42
1300	0.20	22.15	18.01	30.16	31.07	23.11
1350	0.20	21.82	17.97	29.99	30.86	22.80
1400	0.20	21.53	17.95	29.76	30.56	22.50
1450	0.21	21.24	17.88	29.56	30.34	22.21
1500	0.21	20.95	17.87	29.37	30.26	21.90
1550	0.22	20.68	17.77	29.10	29.91	21.68
1600	0.22	20.42	17.73	28.90	29.62	21.58
1650	0.23	20.17	17.65	28.74	29.46	21.42
1700	0.23	19.93	17.54	28.51	29.20	21.09
1750	0.24	19.69	17.43	28.23	28.80	20.79
1800	0.24	19.46	17.39	28.01	28.67	20.57
1850	0.25	19.24	17.25	27.77	28.39	20.31
1900	0.25	19.02	17.19	27.51	28.14	20.01
1950	0.26	18.82	17.06	27.22	27.82	19.78
2000	0.27	18.61	16.93	26.88	27.53	19.57
2025	0.27	18.52	16.85	26.77	27.42	19.41
2050	0.27	18.42	16.76	26.65	27.30	19.31
2075	0.28	18.33	16.70	26.46	27.07	19.22
2100	0.28	18.23	16.63	26.40	26.96	19.05

# Directional Coupler

# D19GA+

## Typical Performance Data

TEST CONDITIONS: INPUT POWER =0 dBm @Temperature = +105 °C

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING LOSS (dB)	DIRECTIVITY (dB)	RETURN LOSS		
				In	Out	Cpl
900	0.17	25.24	18.04	31.92	33.03	27.07
950	0.18	24.79	18.00	31.59	32.54	26.45
1000	0.18	24.35	18.00	31.44	32.39	25.87
1050	0.18	23.94	17.90	31.14	32.03	25.70
1100	0.19	23.55	17.91	30.96	31.88	25.67
1150	0.20	23.17	17.99	30.81	31.65	25.25
1200	0.20	22.81	17.93	30.63	31.46	24.59
1250	0.20	22.47	17.98	30.33	31.26	24.06
1300	0.21	22.15	17.90	30.11	30.95	23.66
1350	0.21	21.83	17.92	29.83	30.65	23.27
1400	0.22	21.53	17.87	29.50	30.23	22.96
1450	0.22	21.24	17.84	29.19	29.90	22.69
1500	0.23	20.96	17.79	28.92	29.73	22.41
1550	0.23	20.69	17.66	28.58	29.34	22.23
1600	0.24	20.42	17.65	28.34	28.99	22.15
1650	0.24	20.17	17.58	28.17	28.82	21.99
1700	0.25	19.93	17.49	27.94	28.56	21.61
1750	0.25	19.70	17.39	27.68	28.19	21.25
1800	0.26	19.47	17.34	27.48	28.08	21.00
1850	0.26	19.25	17.24	27.23	27.79	20.72
1900	0.27	19.03	17.19	26.96	27.55	20.42
1950	0.28	18.83	17.05	26.65	27.22	20.20
2000	0.28	18.62	16.95	26.27	26.88	20.01
2025	0.29	18.53	16.89	26.14	26.77	19.83
2050	0.29	18.43	16.79	26.00	26.61	19.73
2075	0.29	18.34	16.71	25.79	26.37	19.62
2100	0.30	18.24	16.61	25.70	26.24	19.43

# Directional Coupler

# D19GA+

## Typical Performance Data

TEST CONDITIONS: INPUT POWER =0 dBm @Temperature = +125 °C

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING LOSS (dB)	DIRECTIVITY (dB)	RETURN LOSS (dB)		
				In	Out	Cpl
900	0.18	25.25	18.01	32.33	33.75	28.37
950	0.19	24.79	17.93	31.88	33.18	27.44
1000	0.19	24.36	17.97	31.65	32.91	26.72
1050	0.20	23.95	17.95	31.22	32.36	26.58
1100	0.20	23.55	17.93	30.91	32.00	26.65
1150	0.21	23.18	17.97	30.63	31.53	26.24
1200	0.21	22.82	17.95	30.28	31.08	25.43
1250	0.21	22.48	17.91	29.83	30.64	24.76
1300	0.22	22.16	17.92	29.42	30.12	24.27
1350	0.22	21.84	17.85	29.00	29.63	23.86
1400	0.23	21.54	17.80	28.52	29.09	23.56
1450	0.23	21.25	17.77	28.09	28.64	23.29
1500	0.24	20.96	17.74	27.71	28.37	22.95
1550	0.25	20.70	17.65	27.35	27.95	22.66
1600	0.25	20.44	17.52	27.05	27.60	22.52
1650	0.25	20.18	17.47	26.87	27.41	22.34
1700	0.26	19.95	17.34	26.67	27.18	21.97
1750	0.27	19.71	17.28	26.44	26.86	21.58
1800	0.28	19.48	17.22	26.26	26.75	21.26
1850	0.28	19.26	17.14	26.03	26.49	20.92
1900	0.28	19.05	17.07	25.77	26.25	20.60
1950	0.29	18.84	16.97	25.44	25.90	20.42
2000	0.30	18.64	16.83	25.04	25.57	20.26
2025	0.30	18.54	16.74	24.92	25.45	20.09
2050	0.31	18.45	16.66	24.76	25.29	19.98
2075	0.31	18.35	16.56	24.57	25.07	19.85
2100	0.31	18.26	16.48	24.48	24.93	19.61