

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Insertion Loss = -S21 (dB)

Output Return Loss = S22 (dB)

TEST CONDITION: Temperature = +25°C

FREQ	Insertion Loss	Input Return Loss	Output Return Loss	Group Delay
(GHz)	(dB)	(dB)	(dB)	(nsec)
0.01	1.06	-23.1	-23.2	0.36
0.10	1.08	-22.9	-22.9	0.36
0.20	1.09	-22.5	-22.5	0.36
0.40	1.13	-21.4	-21.7	0.36
0.60	1.20	-20.3	-20.7	0.36
0.80	1.29	-19.5	-20.1	0.36
1.00	1.38	-19.3	-19.9	0.37
1.25	1.52	-19.5	-20.3	0.37
1.50	1.69	-20.5	-21.3	0.38
1.75	1.88	-22.1	-22.8	0.39
2.00	2.13	-24.4	-24.6	0.41
2.10	2.25	-25.5	-25.2	0.42
2.20	2.39	-26.7	-25.9	0.43
2.30	2.55	-28.1	-26.5	0.44
2.40	2.73	-29.7	-26.9	0.46
2.50	2.95	-31.5	-27.3	0.47
2.60	3.20	-32.9	-27.4	0.49
2.70	3.51	-32.2	-26.7	0.52
2.80	3.90	-28.9	-25.0	0.54
2.90	4.38	-25.2	-22.6	0.58
3.00	5.02	-21.9	-20.0	0.61
3.10	5.85	-19.2	-17.8	0.66
3.20	6.97	-17.2	-16.2	0.71
3.50	13.97	-15.0	-14.2	0.88
4.00	42.83	-17.1	-17.0	-0.88
4.50	37.66	-19.6	-19.0	0.43
5.00	44.56	-17.7	-16.7	-0.08
5.50	44.88	-13.8	-13.2	0.09
6.00	43.61	-12.1	-11.7	0.23
6.50	44.98	-11.8	-11.5	0.29
7.00	49.10	-12.6	-12.3	0.23
7.50	54.31	-14.6	-14.2	0.11
8.00	58.00	-18.3	-17.3	0.13
8.50	58.56	-23.1	-20.2	0.33
9.00	56.63	-21.4	-18.5	0.46
9.50	52.01	-17.2	-15.2	0.40
10.00	47.86	-14.4	-12.8	0.31
10.50	44.90	-12.8	-11.3	0.32
11.00	42.98	-11.9	-10.3	0.30
11.50	41.70	-11.4	-9.8	0.29
12.00	40.86	-11.2	-9.6	0.29
12.50	40.30	-11.1	-9.5	0.27
13.00	39.72	-10.9	-9.4	0.28
13.50	39.38	-10.6	-9.1	0.26
14.00	39.41	-10.1	-8.8	0.27
14.50	39.35	-9.3	-8.4	0.27
15.00	39.38	-8.5	-7.8	0.27
15.50	39.68	-7.7	-7.2	0.27
16.00	40.04	-6.9	-6.5	0.24
16.50	40.54	-6.2	-6.0	0.22
17.00	41.17	-5.7	-5.5	0.23
17.50	42.03	-5.2	-5.2	0.22
18.00	43.11	-4.9	-4.9	0.21
18.50	44.47	-4.7	-4.7	0.19
19.00	46.24	-4.6	-4.5	0.18
19.50	48.23	-4.5	-4.4	0.15
20.00	51.20	-4.5	-4.3	0.10
20.50	54.11	-4.5	-4.3	-0.11
21.00	49.62	-4.6	-4.4	0.09
21.50	46.71	-4.7	-4.5	0.10
22.00	42.94	-4.8	-4.7	0.18
22.50	40.47	-5.6	-5.6	0.28
23.00	41.08	-6.1	-6.2	0.21
23.50	41.42	-6.1	-6.2	0.20
24.00	41.63	-5.9	-6.3	0.20
24.50	42.14	-5.6	-6.2	0.20
25.00	43.06	-5.4	-6.1	0.19
25.50	44.31	-5.2	-5.9	0.22
26.00	46.16	-5.0	-5.8	0.22
26.50	49.11	-5.0	-5.7	0.19

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Insertion Loss = -S21 (dB)

Output Return Loss = S22 (dB)

TEST CONDITION: Temperature = -45°C

FREQ	Insertion Loss	Input Return Loss	Output Return Loss	Group Delay
(GHz)	(dB)	(dB)	(dB)	(nsec)
0.01	0.88	-25.9	-26.0	0.36
0.10	0.89	-25.4	-25.3	0.36
0.20	0.91	-24.8	-24.7	0.36
0.40	0.95	-23.2	-23.6	0.36
0.60	1.01	-21.6	-22.0	0.36
0.80	1.09	-20.4	-21.0	0.36
1.00	1.19	-19.7	-20.3	0.37
1.25	1.32	-19.7	-20.5	0.37
1.50	1.46	-20.6	-21.3	0.38
1.75	1.63	-22.1	-22.8	0.39
2.00	1.85	-24.5	-24.6	0.41
2.10	1.95	-25.6	-25.2	0.42
2.20	2.07	-26.8	-25.8	0.43
2.30	2.21	-28.1	-26.2	0.44
2.40	2.37	-29.4	-26.5	0.46
2.50	2.55	-31.1	-26.9	0.47
2.60	2.77	-32.8	-27.0	0.49
2.70	3.03	-33.4	-26.6	0.51
2.80	3.36	-30.5	-25.2	0.54
2.90	3.77	-26.0	-22.9	0.57
3.00	4.31	-22.1	-20.1	0.61
3.10	5.02	-19.0	-17.6	0.66
3.20	5.98	-16.7	-15.7	0.71
3.50	12.03	-14.4	-13.6	0.93
4.00	44.82	-16.4	-16.4	-1.47
4.50	37.22	-19.7	-19.1	0.52
5.00	44.55	-17.8	-16.7	-0.04
5.50	45.43	-13.5	-12.9	0.04
6.00	43.70	-11.7	-11.4	0.25
6.50	44.74	-11.5	-11.2	0.29
7.00	48.65	-12.5	-12.1	0.23
7.50	54.38	-14.5	-14.1	0.07
8.00	57.31	-17.9	-17.2	0.27
8.50	57.83	-22.5	-20.0	0.26
9.00	55.90	-21.5	-18.7	0.46
9.50	52.07	-17.2	-15.2	0.36
10.00	47.90	-14.3	-12.6	0.37
10.50	45.05	-12.5	-11.0	0.28
11.00	43.08	-11.6	-10.0	0.28
11.50	42.04	-11.1	-9.4	0.27
12.00	41.10	-10.9	-9.2	0.28
12.50	40.70	-11.0	-9.3	0.25
13.00	39.98	-10.9	-9.4	0.28
13.50	39.53	-10.5	-9.1	0.28
14.00	39.64	-9.9	-8.6	0.26
14.50	39.45	-9.3	-8.2	0.25
15.00	39.41	-8.6	-7.7	0.27
15.50	39.64	-7.7	-7.2	0.26
16.00	40.05	-6.8	-6.5	0.22
16.50	40.48	-6.0	-5.7	0.21
17.00	40.99	-5.4	-5.2	0.21
17.50	41.70	-5.0	-4.8	0.23
18.00	42.51	-4.7	-4.6	0.19
18.50	43.44	-4.5	-4.5	0.19
19.00	44.65	-4.3	-4.4	0.17
19.50	45.91	-4.2	-4.1	0.13
20.00	47.39	-4.2	-4.0	0.09
20.50	47.14	-4.3	-4.0	0.13
21.00	47.26	-4.5	-4.2	0.10
21.50	46.42	-4.6	-4.4	0.09
22.00	43.97	-4.6	-4.4	0.13
22.50	40.57	-5.0	-4.9	0.26
23.00	39.81	-5.8	-5.7	0.25
23.50	40.25	-5.7	-5.8	0.19
24.00	40.22	-5.6	-5.9	0.19
24.50	39.82	-5.5	-5.9	0.23
25.00	40.46	-5.3	-6.0	0.23
25.50	41.67	-5.1	-5.9	0.26
26.00	44.07	-4.9	-5.8	0.26
26.50	49.10	-4.7	-5.5	0.11

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Insertion Loss = -S21 (dB)

Output Return Loss = S22 (dB)

TEST CONDITION: Temperature = +85°C

FREQ	Insertion Loss	Input Return Loss	Output Return Loss	Group Delay
(GHz)	(dB)	(dB)	(dB)	(nsec)
0.01	1.24	-21.2	-21.3	0.36
0.10	1.24	-21.1	-21.1	0.36
0.20	1.26	-20.9	-20.9	0.36
0.40	1.31	-20.1	-20.3	0.36
0.60	1.38	-19.3	-19.7	0.36
0.80	1.47	-18.8	-19.3	0.36
1.00	1.58	-18.7	-19.4	0.37
1.25	1.73	-19.1	-20.0	0.37
1.50	1.91	-20.2	-21.1	0.38
1.75	2.13	-21.9	-22.7	0.40
2.00	2.41	-24.4	-24.6	0.42
2.10	2.54	-25.7	-25.3	0.42
2.20	2.70	-27.1	-26.0	0.44
2.30	2.87	-28.8	-26.7	0.45
2.40	3.08	-30.7	-27.2	0.46
2.50	3.32	-32.7	-27.6	0.48
2.60	3.61	-33.7	-27.7	0.50
2.70	3.96	-32.4	-26.8	0.52
2.80	4.40	-29.0	-25.0	0.55
2.90	4.95	-25.4	-22.6	0.58
3.00	5.67	-22.3	-20.3	0.62
3.10	6.61	-19.7	-18.2	0.66
3.20	7.87	-17.9	-16.7	0.71
3.50	15.62	-15.4	-14.7	0.82
4.00	41.79	-17.2	-17.3	-0.62
4.50	38.08	-19.1	-18.7	0.38
5.00	44.48	-17.3	-16.5	-0.04
5.50	44.59	-13.7	-13.2	0.12
6.00	43.66	-12.1	-11.8	0.26
6.50	45.35	-11.9	-11.7	0.26
7.00	49.63	-12.8	-12.5	0.18
7.50	54.83	-15.2	-14.7	0.19
8.00	57.66	-19.3	-18.2	0.32
8.50	58.58	-24.1	-21.0	0.26
9.00	56.06	-21.1	-18.8	0.44
9.50	51.66	-17.0	-15.4	0.38
10.00	47.44	-14.4	-13.0	0.38
10.50	44.81	-12.9	-11.5	0.29
11.00	42.89	-12.2	-10.7	0.30
11.50	41.90	-11.9	-10.3	0.24
12.00	40.95	-11.8	-10.1	0.29
12.50	40.64	-11.5	-9.9	0.27
13.00	40.15	-11.1	-9.6	0.27
13.50	39.84	-10.6	-9.1	0.27
14.00	40.13	-9.9	-8.7	0.27
14.50	39.96	-9.2	-8.2	0.26
15.00	39.95	-8.4	-7.7	0.25
15.50	40.17	-7.6	-7.2	0.25
16.00	40.51	-7.0	-6.7	0.24
16.50	40.84	-6.4	-6.3	0.24
17.00	41.37	-5.9	-5.9	0.21
17.50	42.20	-5.5	-5.5	0.23
18.00	43.13	-5.2	-5.3	0.19
18.50	44.38	-5.0	-5.1	0.18
19.00	45.81	-4.8	-5.0	0.16
19.50	47.56	-4.7	-4.8	0.11
20.00	49.54	-4.7	-4.6	0.02
20.50	48.32	-4.7	-4.6	0.12
21.00	47.99	-4.8	-4.6	0.02
21.50	44.40	-5.0	-4.8	0.16
22.00	41.02	-5.4	-5.1	0.23
22.50	40.12	-6.1	-5.9	0.21
23.00	39.49	-6.3	-6.1	0.24
23.50	39.98	-6.1	-6.1	0.20
24.00	40.04	-5.9	-6.2	0.19
24.50	40.15	-5.8	-6.3	0.22
25.00	40.85	-5.6	-6.4	0.21
25.50	41.93	-5.4	-6.3	0.24
26.00	44.16	-5.4	-6.3	0.28
26.50	49.19	-5.3	-6.2	0.12

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)

Insertion Loss = -S21 (dB)

Output Return Loss = S22 (dB)

TEST CONDITION: Temperature = +105°C

FREQ	Insertion Loss	Input Return Loss	Output Return Loss	Group Delay
(GHz)	(dB)	(dB)	(dB)	(nsec)
0.01	1.29	-20.7	-20.8	0.36
0.10	1.29	-20.6	-20.7	0.36
0.20	1.31	-20.4	-20.5	0.36
0.40	1.36	-19.7	-19.9	0.36
0.60	1.43	-19.0	-19.4	0.36
0.80	1.52	-18.6	-19.0	0.36
1.00	1.63	-18.5	-19.2	0.37
1.25	1.78	-19.0	-19.8	0.37
1.50	1.96	-20.1	-21.1	0.38
1.75	2.18	-21.8	-22.7	0.40
2.00	2.47	-24.4	-24.7	0.42
2.10	2.61	-25.7	-25.5	0.43
2.20	2.77	-27.2	-26.2	0.44
2.30	2.95	-29.0	-26.9	0.45
2.40	3.17	-31.0	-27.5	0.46
2.50	3.42	-33.1	-27.9	0.48
2.60	3.72	-34.2	-28.0	0.50
2.70	4.08	-32.8	-27.1	0.52
2.80	4.53	-29.3	-25.2	0.55
2.90	5.11	-25.7	-22.8	0.58
3.00	5.85	-22.5	-20.4	0.62
3.10	6.82	-19.9	-18.3	0.66
3.20	8.13	-18.0	-16.8	0.71
3.50	16.08	-15.5	-14.7	0.80
4.00	41.57	-17.3	-17.3	-0.57
4.50	38.19	-19.0	-18.6	0.37
5.00	44.38	-17.2	-16.3	-0.05
5.50	44.49	-13.7	-13.2	0.12
6.00	43.59	-12.1	-11.9	0.23
6.50	45.40	-11.9	-11.7	0.27
7.00	49.62	-12.9	-12.7	0.14
7.50	54.92	-15.3	-14.9	0.14
8.00	57.41	-19.7	-18.5	0.19
8.50	58.65	-24.4	-21.3	0.38
9.00	56.09	-21.0	-18.8	0.37
9.50	51.46	-17.0	-15.4	0.32
10.00	47.42	-14.5	-13.1	0.30
10.50	44.74	-13.1	-11.7	0.27
11.00	42.84	-12.4	-10.9	0.29
11.50	41.86	-12.1	-10.5	0.27
12.00	40.94	-11.9	-10.2	0.31
12.50	40.62	-11.6	-9.9	0.27
13.00	40.17	-11.1	-9.6	0.27
13.50	39.90	-10.5	-9.1	0.29
14.00	40.15	-9.8	-8.6	0.25
14.50	39.99	-9.1	-8.1	0.26
15.00	39.93	-8.3	-7.6	0.26
15.50	40.14	-7.6	-7.1	0.25
16.00	40.45	-7.0	-6.7	0.24
16.50	40.83	-6.5	-6.4	0.22
17.00	41.35	-6.1	-6.0	0.21
17.50	42.15	-5.6	-5.7	0.21
18.00	43.19	-5.3	-5.4	0.21
18.50	44.42	-5.1	-5.2	0.19
19.00	45.99	-4.9	-5.1	0.17
19.50	47.68	-4.8	-4.9	0.10
20.00	49.91	-4.8	-4.7	0.06
20.50	48.54	-4.8	-4.6	0.11
21.00	47.96	-4.8	-4.6	0.00
21.50	44.23	-5.0	-4.8	0.15
22.00	40.95	-5.4	-5.2	0.25
22.50	40.28	-6.1	-5.8	0.20
23.00	39.55	-6.3	-6.0	0.26
23.50	40.06	-6.1	-6.1	0.17
24.00	40.12	-5.9	-6.2	0.18
24.50	40.17	-5.8	-6.4	0.23
25.00	40.89	-5.7	-6.5	0.23
25.50	41.93	-5.6	-6.5	0.25
26.00	44.42	-5.5	-6.5	0.29
26.50	49.67	-5.4	-6.4	0.13