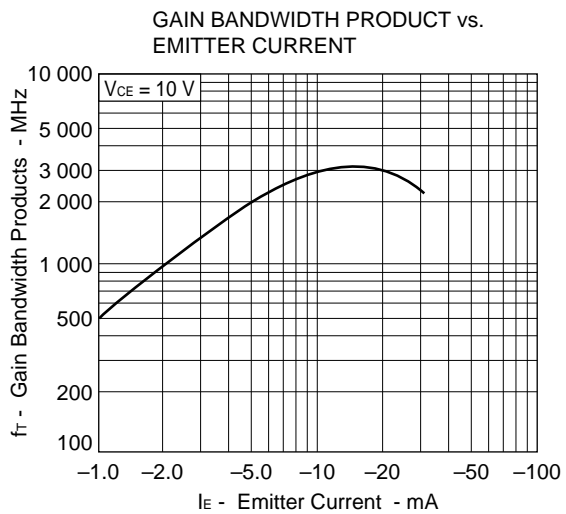
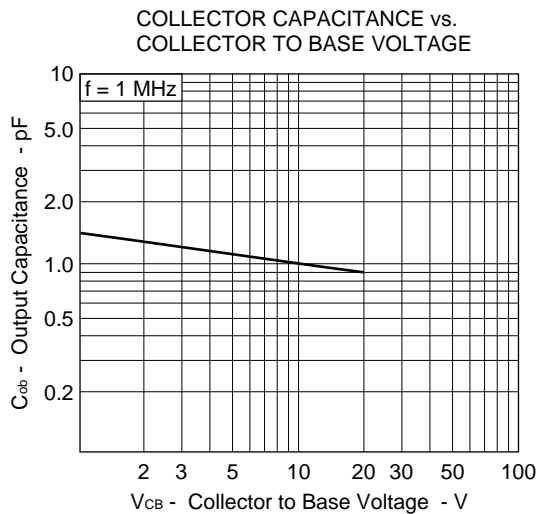
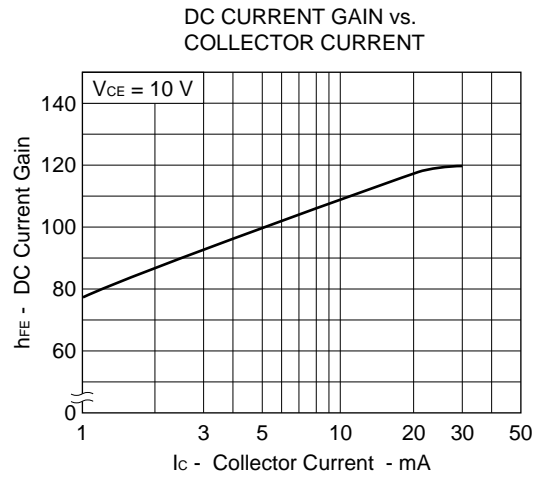
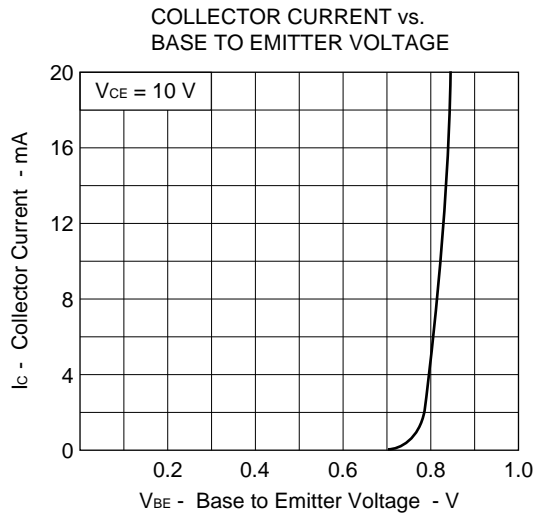
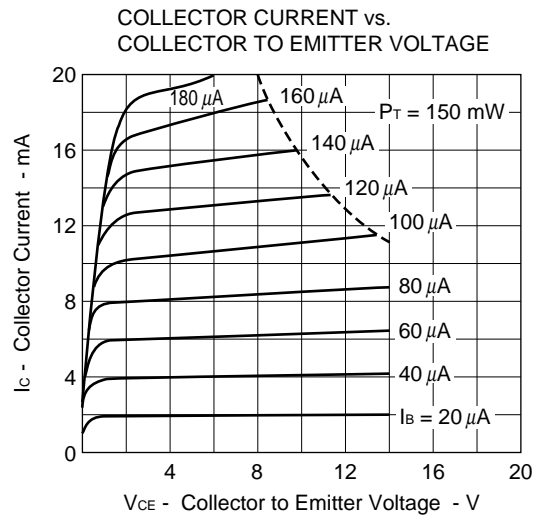
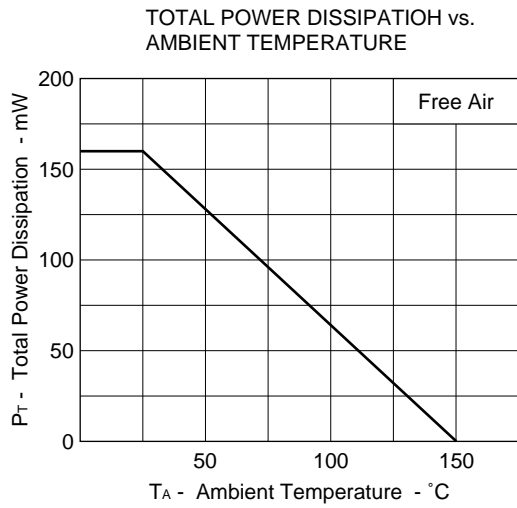


TYPICAL CHARACTERISTICS (T_A = 25 °C)



S-PARAMETER

V_{CE} = 3 V, I_c = 3 mA

Frequency MHz	S11		S21		S12		S22	
	MAG	ANG	MAG	ANG	MAG	ANG	MAG	ANG
100.000	0.804	-45.7	8.213	145.8	0.051	70.5	0.904	-18.9
200.000	0.663	-78.7	6.354	123.4	0.074	55.7	0.749	-27.9
300.000	0.544	-103.3	4.902	107.4	0.090	47.4	0.627	-33.1
400.000	0.483	-121.1	3.925	98.0	0.098	47.5	0.558	-33.6
500.000	0.450	-135.5	3.238	89.4	0.104	46.3	0.501	-33.8
600.000	0.433	-148.6	2.887	84.7	0.115	48.3	0.481	-34.0
700.000	0.418	-160.0	2.571	77.0	0.122	48.4	0.461	-34.2
800.000	0.414	-168.5	2.332	72.3	0.133	50.1	0.455	-36.3
900.000	0.412	-175.2	2.063	66.7	0.139	52.8	0.447	-38.2
1000.000	0.429	178.0	1.899	62.1	0.149	52.6	0.432	-41.9
1100.000	0.445	171.0	1.750	58.6	0.160	55.6	0.423	-45.0
1200.000	0.449	163.0	1.648	53.5	0.172	55.3	0.404	-48.2
1300.000	0.447	157.8	1.575	49.1	0.188	55.8	0.390	-51.1
1400.000	0.446	153.9	1.438	45.2	0.192	55.9	0.379	-54.1
1500.000	0.466	150.6	1.350	39.8	0.206	54.9	0.372	-57.6
1600.000	0.485	147.2	1.267	39.1	0.215	58.1	0.367	-62.0
1700.000	0.502	142.0	1.186	36.3	0.229	57.5	0.359	-66.7
1800.000	0.518	138.0	1.182	34.2	0.249	59.2	0.347	-72.7
1900.000	0.525	134.7	1.135	31.0	0.268	58.1	0.339	-77.7
2000.000	0.538	131.6	1.122	25.8	0.286	56.0	0.330	-82.9

V_{CE} = 3 V, I_c = 10 mA

Frequency MHz	S11		S21		S12		S22	
	MAG	ANG	MAG	ANG	MAG	ANG	MAG	ANG
100.000	0.537	-84.5	14.925	124.8	0.034	63.8	0.705	-29.3
200.000	0.438	-123.6	9.075	103.9	0.047	57.7	0.516	-31.2
300.000	0.393	-145.1	6.339	92.2	0.062	57.9	0.436	-30.4
400.000	0.383	-158.6	4.804	85.5	0.073	62.0	0.401	-28.2
500.000	0.386	-168.4	3.887	79.4	0.084	62.4	0.375	-27.0
600.000	0.390	-177.2	3.368	76.3	0.099	65.7	0.368	-26.8
700.000	0.389	175.1	3.003	70.3	0.111	65.0	0.361	-27.1
800.000	0.392	170.2	2.697	66.3	0.128	65.2	0.359	-28.9
900.000	0.397	166.7	2.371	61.9	0.139	66.3	0.357	-31.2
1000.000	0.422	162.8	2.169	57.9	0.154	64.8	0.346	-34.8
1100.000	0.444	158.1	1.997	55.1	0.166	66.1	0.339	-38.1
1200.000	0.451	151.7	1.872	50.5	0.180	64.8	0.325	-41.3
1300.000	0.456	147.6	1.786	46.3	0.198	64.4	0.315	-44.3
1400.000	0.457	144.9	1.620	42.8	0.205	63.4	0.303	-47.2
1500.000	0.477	142.5	1.519	37.6	0.221	61.8	0.299	-50.7
1600.000	0.495	140.2	1.419	37.1	0.231	63.8	0.294	-55.3
1700.000	0.515	135.9	1.322	34.4	0.246	62.4	0.287	-60.4
1800.000	0.532	132.8	1.313	32.6	0.266	63.3	0.276	-66.6
1900.000	0.541	130.0	1.259	29.5	0.285	61.5	0.269	-72.0
2000.000	0.557	127.3	1.240	24.4	0.305	58.9	0.262	-78.0

V_{CE} = 5 V, I_c = 3 mA

Frequency MHz	S11		S21		S12		S22	
	MAG	ANG	MAG	ANG	MAG	ANG	MAG	ANG
100.000	0.816	-42.4	8.284	147.4	0.044	69.4	0.920	-16.7
200.000	0.673	-73.7	6.531	125.5	0.066	57.1	0.777	-24.8
300.000	0.546	-97.6	5.085	109.6	0.083	49.3	0.663	-29.7
400.000	0.478	-115.1	4.100	100.1	0.090	49.3	0.597	-30.1
500.000	0.440	-129.6	3.399	91.5	0.096	48.3	0.542	-30.1
600.000	0.419	-143.0	3.035	86.8	0.106	50.4	0.525	-30.4
700.000	0.402	-154.8	2.708	79.1	0.113	50.5	0.505	-30.4
800.000	0.394	-163.8	2.459	74.4	0.124	51.9	0.501	-32.4
900.000	0.392	-171.1	2.172	68.8	0.130	54.9	0.494	-34.1
1000.000	0.405	-178.3	1.998	64.1	0.139	54.8	0.480	-37.6
1100.000	0.420	174.2	1.839	60.7	0.149	57.9	0.470	-40.5
1200.000	0.423	166.0	1.734	55.6	0.160	57.7	0.451	-43.1
1300.000	0.423	160.6	1.652	51.4	0.175	58.4	0.437	-45.8
1400.000	0.422	156.6	1.509	47.4	0.180	58.9	0.425	-48.2
1500.000	0.442	153.2	1.420	42.3	0.194	58.2	0.420	-51.1
1600.000	0.460	149.5	1.332	41.4	0.203	61.4	0.414	-54.9
1700.000	0.478	144.2	1.249	38.5	0.216	60.9	0.407	-59.1
1800.000	0.494	140.1	1.244	36.4	0.236	62.5	0.395	-64.2
1900.000	0.502	136.6	1.197	33.2	0.254	61.4	0.385	-68.4
2000.000	0.515	133.5	1.181	27.9	0.273	59.3	0.375	-73.2

V_{CE} = 5 V, I_c = 10 mA

Frequency MHz	S11		S21		S12		S22	
	MAG	ANG	MAG	ANG	MAG	ANG	MAG	ANG
100.000	0.548	-77.8	15.356	126.9	0.032	64.6	0.742	-26.0
200.000	0.427	-116.4	9.522	105.5	0.043	59.2	0.562	-27.7
300.000	0.372	-138.7	6.709	93.9	0.057	59.2	0.483	-27.0
400.000	0.355	-153.1	5.100	87.1	0.067	62.7	0.449	-24.9
500.000	0.354	-163.7	4.127	81.0	0.078	63.7	0.423	-23.8
600.000	0.357	-173.0	3.574	77.9	0.092	66.7	0.419	-23.6
700.000	0.357	178.8	3.187	71.9	0.104	66.4	0.411	-23.6
800.000	0.360	173.6	2.864	68.1	0.120	66.8	0.412	-25.5
900.000	0.366	169.6	2.517	63.6	0.130	67.8	0.410	-27.5
1000.000	0.389	165.3	2.302	59.7	0.144	66.7	0.400	-31.0
1100.000	0.410	160.4	2.114	56.9	0.156	67.8	0.391	-33.9
1200.000	0.419	154.0	1.984	52.4	0.168	66.5	0.378	-36.7
1300.000	0.423	149.9	1.889	48.3	0.185	66.4	0.366	-39.1
1400.000	0.426	147.0	1.714	44.7	0.192	65.6	0.356	-41.5
1500.000	0.446	144.7	1.607	39.6	0.207	64.3	0.352	-44.3
1600.000	0.465	142.2	1.505	39.3	0.218	66.4	0.347	-48.1
1700.000	0.485	137.9	1.405	36.5	0.231	65.2	0.341	-52.3
1800.000	0.504	134.6	1.395	34.5	0.251	66.0	0.330	-57.5
1900.000	0.513	131.7	1.337	31.5	0.270	64.5	0.322	-62.1
2000.000	0.529	129.2	1.318	26.4	0.289	62.1	0.313	-67.0

V_{CE} = 10 V, I_c = 3 mA

Frequency MHz	S11		S21		S12		S22	
	MAG	ANG	MAG	ANG	MAG	ANG	MAG	ANG
100.000	0.833	-38.7	8.311	149.3	0.037	73.0	0.934	-14.4
200.000	0.692	-67.4	6.682	128.1	0.058	58.4	0.809	-21.5
300.000	0.555	-90.0	5.274	112.1	0.074	51.6	0.703	-26.2
400.000	0.478	-106.8	4.293	102.7	0.082	51.1	0.644	-26.3
500.000	0.430	-121.0	3.569	93.9	0.088	50.2	0.587	-26.4
600.000	0.403	-134.8	3.201	89.4	0.097	52.7	0.575	-26.6
700.000	0.381	-146.8	2.866	81.5	0.104	52.5	0.556	-26.5
800.000	0.369	-156.6	2.602	76.9	0.113	54.1	0.554	-28.4
900.000	0.365	-164.7	2.301	71.0	0.120	57.0	0.548	-29.8
1000.000	0.374	-172.5	2.116	66.5	0.129	57.3	0.534	-33.2
1100.000	0.385	179.5	1.947	63.0	0.137	60.0	0.525	-35.6
1200.000	0.388	170.8	1.834	58.0	0.147	60.1	0.504	-38.0
1300.000	0.388	165.1	1.746	53.9	0.161	61.0	0.491	-40.1
1400.000	0.387	160.9	1.595	49.8	0.167	61.7	0.478	-42.1
1500.000	0.408	157.0	1.498	44.8	0.179	61.4	0.475	-44.4
1600.000	0.426	153.2	1.413	43.9	0.187	64.5	0.470	-47.4
1700.000	0.444	147.5	1.324	41.0	0.200	64.1	0.465	-51.0
1800.000	0.460	143.2	1.313	38.8	0.219	66.0	0.453	-55.4
1900.000	0.468	139.6	1.267	35.5	0.236	65.1	0.444	-59.1
2000.000	0.482	136.3	1.253	30.2	0.254	63.0	0.433	-63.1

V_{CE} = 10 V, I_c = 10 mA

Frequency MHz	S11		S21		S12		S22	
	MAG	ANG	MAG	ANG	MAG	ANG	MAG	ANG
100.000	0.575	-68.9	15.642	129.8	0.029	67.0	0.783	-22.3
200.000	0.424	-105.2	9.996	108.2	0.040	61.1	0.616	-24.1
300.000	0.351	-128.2	7.060	96.0	0.053	59.6	0.537	-23.8
400.000	0.322	-143.4	5.391	89.1	0.063	63.9	0.505	-21.8
500.000	0.315	-155.1	4.362	83.0	0.073	64.0	0.478	-20.7
600.000	0.314	-165.5	3.794	79.8	0.086	67.4	0.476	-20.7
700.000	0.313	-174.5	3.274	73.4	0.097	67.2	0.470	-20.6
800.000	0.316	179.6	3.044	70.1	0.111	67.5	0.472	-22.4
900.000	0.323	175.0	2.679	65.5	0.120	68.8	0.472	-24.0
1000.000	0.344	170.0	2.450	61.7	0.133	67.6	0.462	-27.4
1100.000	0.363	164.6	2.250	58.9	0.144	69.1	0.454	-29.8
1200.000	0.374	157.9	2.109	54.5	0.155	68.1	0.438	-32.3
1300.000	0.378	153.6	2.008	50.5	0.171	67.9	0.427	-34.2
1400.000	0.382	150.7	1.822	46.9	0.177	67.7	0.417	-36.0
1500.000	0.403	148.2	1.709	41.9	0.191	66.3	0.415	-38.2
1600.000	0.423	145.6	1.600	41.5	0.201	68.9	0.410	-41.2
1700.000	0.443	141.1	1.497	38.8	0.214	67.8	0.406	-44.8
1800.000	0.463	137.7	1.484	36.8	0.233	69.0	0.396	-49.1
1900.000	0.474	134.7	1.429	33.8	0.249	67.4	0.388	-52.8
2000.000	0.490	131.9	1.405	28.5	0.268	65.0	0.378	-57.0

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