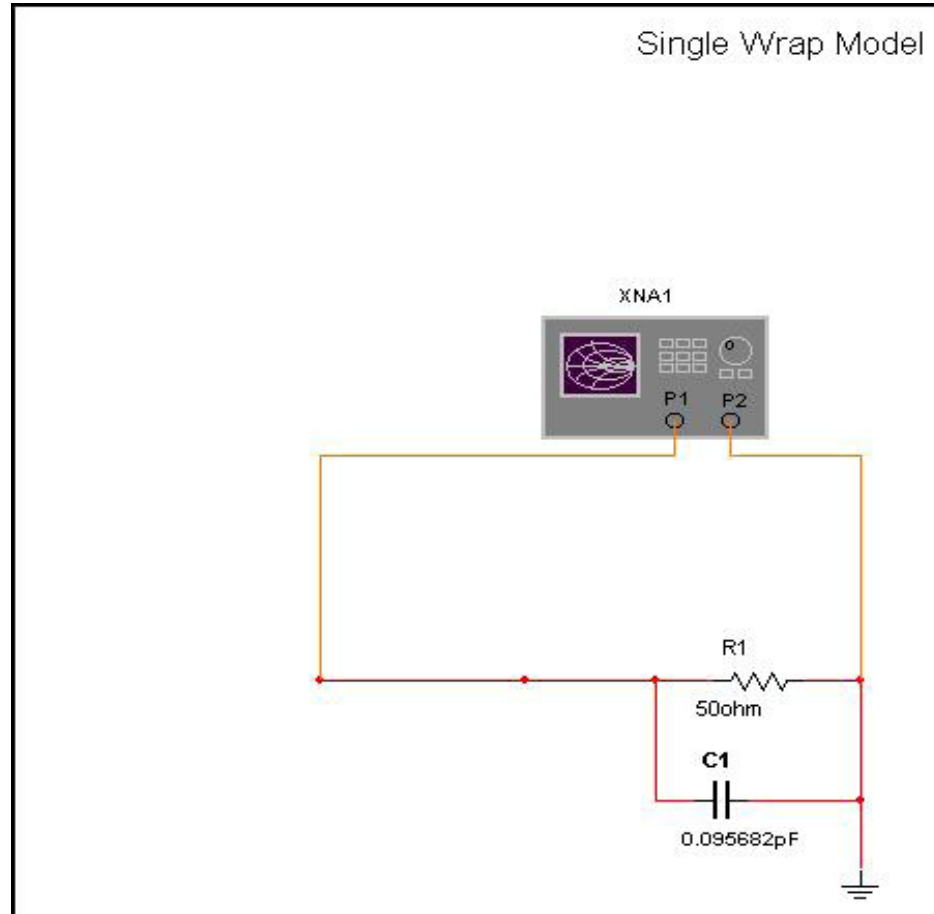


IMS Data - See accompanying note for clarifying statements

NG30505SG			
Resistor Modeling Data			
FREQ.(GHz)	Return Loss	S11	Phase(S11)
1.00000	-36.4619763	0.01503	-90.86107
1.26174	-34.443128	0.01896	-91.08641
1.52349	-32.8064808	0.02289	-91.31171
1.78523	-31.4302157	0.02682	-91.53696
2.04698	-30.2428349	0.03075	-91.76218
2.30872	-29.1987789	0.03468	-91.98733
2.57047	-28.2672256	0.03860	-92.21243
2.83221	-27.4263354	0.04253	-92.43746
3.09396	-26.6600856	0.04645	-92.66241
3.35570	-25.9563558	0.05037	-92.88728
3.61745	-25.3057664	0.05429	-93.11206
3.87919	-24.7009046	0.05820	-93.33674
4.14094	-24.1358087	0.06212	-93.56133
4.40268	-23.6056213	0.06603	-93.78580
4.66443	-23.1063183	0.06993	-94.01016
4.92617	-22.6345438	0.07384	-94.23439
5.18792	-22.1874568	0.07774	-94.45849
5.44966	-21.7626402	0.08163	-94.68246
5.71141	-21.3580165	0.08553	-94.90628
5.97315	-20.9717846	0.08942	-95.12996
6.23490	-20.6023792	0.09330	-95.35348
6.49664	-20.2484255	0.09718	-95.57683
6.75839	-19.9087149	0.10106	-95.80001
7.02013	-19.5821721	0.10493	-96.02302
7.28188	-19.2678372	0.10879	-96.24584
7.54362	-18.9648672	0.11266	-96.46848
7.80537	-18.6724899	0.11651	-96.69092
8.06711	-18.39001	0.12036	-96.91315
8.32886	-18.1168128	0.12421	-97.13518
8.59060	-17.8523269	0.12805	-97.35699



8.85235	-17.5960327	0.13189	-97.57859
9.11409	-17.3474622	0.13571	-97.79995
9.37584	-17.1061875	0.13954	-98.02108
9.63758	-16.8718158	0.14335	-98.24197
9.89933	-16.6439742	0.14716	-98.46261
10.16107	-16.4223307	0.15097	-98.68300
10.42282	-16.2065842	0.15476	-98.90313
10.68456	-15.9964395	0.15855	-99.12300
10.94631	-15.7916283	0.16234	-99.34259
11.20805	-15.5919171	0.16611	-99.56191
11.46980	-15.3970629	0.16988	-99.78095
11.73154	-15.2068594	0.17364	-99.99970
11.99329	-15.0210991	0.17740	-100.21820
12.25503	-14.8396024	0.18114	-100.43630
12.51678	-14.6621873	0.18488	-100.65420
12.77852	-14.4886919	0.18861	-100.87170
13.04027	-14.3189645	0.19233	-101.08890
13.30201	-14.152858	0.19605	-101.30580
13.56376	-13.9902338	0.19975	-101.52240
13.82550	-13.8309614	0.20345	-101.73860
14.08725	-13.6749218	0.20714	-101.95450
14.34899	-13.5220028	0.21081	-102.17010
14.61074	-13.3720858	0.21448	-102.38530
14.87248	-13.2250748	0.21815	-102.60010
15.13423	-13.0808749	0.22180	-102.81460
15.39597	-12.9393843	0.22544	-103.02870
15.65772	-12.8005181	0.22907	-103.24250
15.91946	-12.6641955	0.23270	-103.45590
16.18121	-12.5303359	0.23631	-103.66890
16.44295	-12.3988592	0.23991	-103.88150
16.70470	-12.2696997	0.24351	-104.09370
16.96644	-12.1427806	0.24709	-104.30560
17.22819	-12.0180394	0.25067	-104.51700
17.48993	-11.8954162	0.25423	-104.72800
17.75168	-11.7748471	0.25779	-104.93870
18.01342	-11.6562778	0.26133	-105.14890
18.27517	-11.5396463	0.26486	-105.35870

18.53691	-11.4249064	0.26838	-105.56810
18.79866	-11.3120043	0.27189	-105.77700
19.06040	-11.2008947	0.27539	-105.98550
19.32215	-11.091528	0.27888	-106.19360
19.58389	-10.9838566	0.28236	-106.40130
19.84564	-10.8778438	0.28583	-106.60850
20.10738	-10.7734457	0.28929	-106.81520
20.36913	-10.6706227	0.29273	-107.02150
20.63087	-10.5693341	0.29616	-107.22740
20.89262	-10.4695436	0.29959	-107.43280
21.15436	-10.3712191	0.30300	-107.63770
21.41611	-10.274324	0.30640	-107.84220
21.67785	-10.1788259	0.30978	-108.04620
21.93960	-10.084691	0.31316	-108.24970
22.20134	-9.99188905	0.31652	-108.45280
22.46309	-9.90039402	0.31988	-108.65540
22.72483	-9.81017253	0.32321	-108.85750
22.98658	-9.72119775	0.32654	-109.05910
23.24832	-9.63344641	0.32986	-109.26020
23.51007	-9.54688818	0.33316	-109.46080
23.77181	-9.46149899	0.33645	-109.66090
24.03356	-9.37725554	0.33973	-109.86060
24.29530	-9.29413533	0.34300	-110.05970
24.55705	-9.21211405	0.34625	-110.25830
24.81879	-9.13116823	0.34950	-110.45650
25.08054	-9.05127762	0.35272	-110.65410
25.34228	-8.97242259	0.35594	-110.85120
25.60403	-8.89457932	0.35915	-111.04780
25.86577	-8.81773193	0.36234	-111.24380
26.12752	-8.74186265	0.36552	-111.43940
26.38926	-8.66694717	0.36868	-111.63440
26.65101	-8.59297365	0.37184	-111.82890
26.91275	-8.51991898	0.37498	-112.02290
27.17450	-8.44776997	0.37810	-112.21630
27.43624	-8.37650924	0.38122	-112.40920
27.69799	-8.30612221	0.38432	-112.60160
27.95973	-8.23659019	0.38741	-112.79340

28.22148	-8.16789954	0.39049	-112.98470
28.48322	-8.10003477	0.39355	-113.17550
28.74497	-8.03298084	0.39660	-113.36570
29.00671	-7.96672749	0.39964	-113.55540
29.26846	-7.9012561	0.40266	-113.74450
29.53020	-7.83655715	0.40567	-113.93310
29.79195	-7.77261498	0.40867	-114.12110
30.05369	-7.7094165	0.41165	-114.30860
30.31544	-7.64695316	0.41462	-114.49550
30.57718	-7.58521036	0.41758	-114.68190
30.83893	-7.52417394	0.42052	-114.86770
31.10067	-7.46383623	0.42346	-115.05300
31.36242	-7.40418572	0.42637	-115.23770
31.62416	-7.34520915	0.42928	-115.42180
31.88591	-7.28689562	0.43217	-115.60540
32.14765	-7.22923651	0.43505	-115.78840
32.40940	-7.17222142	0.43791	-115.97090
32.67114	-7.11584024	0.44077	-116.15280
32.93289	-7.0600831	0.44360	-116.33410
33.19463	-7.00493841	0.44643	-116.51480
33.45638	-6.95040069	0.44924	-116.69500
33.71812	-6.89645691	0.45204	-116.87470
33.97987	-6.84310007	0.45483	-117.05370
34.24161	-6.79032144	0.45760	-117.23220
34.50336	-6.73811252	0.46036	-117.41010
34.76510	-6.68646499	0.46310	-117.58750
35.02685	-6.63536887	0.46583	-117.76420
35.28859	-6.58481813	0.46855	-117.94040
35.55034	-6.53480317	0.47126	-118.11610
35.81208	-6.48531829	0.47395	-118.29110
36.07383	-6.43635429	0.47663	-118.46560
36.33557	-6.38790397	0.47930	-118.63950
36.59732	-6.33996031	0.48195	-118.81280
36.85906	-6.29251642	0.48459	-118.98560
37.12081	-6.2455656	0.48722	-119.15780
37.38255	-6.19909949	0.48983	-119.32940
37.64430	-6.15311346	0.49243	-119.50040

37.90604	-6.10759948	0.49502	-119.67090
38.16779	-6.06255141	0.49759	-119.84070
38.42953	-6.01796328	0.50015	-120.01000
38.69128	-5.97382748	0.50270	-120.17880
38.95302	-5.93014003	0.50523	-120.34690
39.21477	-5.88689188	0.50776	-120.51450
39.47651	-5.84408099	0.51027	-120.68150
39.73826	-5.80169859	0.51276	-120.84790
40.00000	-5.75974114	0.51524	-121.01380