N5244A/45A 4-Port Overall Block Diagram (Includes Options 400-Standard; 419-Attenuators and Bias Tees; and 423-Combiner and Source Bypass Switches) Service Guide: N5245-90001

Band	Mixer Brick L.O. Harmonic Number	❶ A15 Synthesizer Frequency (GHz)	❷ A25 HMA26.5 Frequency (GHz)	❸ A4/A17 Synthesizer Frequency (GHz)	❹ A5/A13 Source Frequency (GHz)	❺ A7/A8/A12/A13 50 GHz Doubler Frequency (GHz)
0	-	-	-	-	-	-
1	-	-	-	-	-	-
2	1	0.01254 to 0.01654	0.01254 to 0.01654	0.010 to 0.014	0.010 to 0.014	0.010 to 0.014
3	1	0.01654 to 0.02154	0.01654 to 0.02154	0.014 to 0.019	0.014 to 0.019	0.014 to 0.019
4	1	0.02154 to 0.02954	0.02154 to 0.02954	0.019 to 0.027	0.019 to 0.027	0.019 to 0.027
5	1	0.02954 to 0.04054	0.02954 to 0.04054	0.027 to 0.038	0.027 to 0.038	0.027 to 0.038
6	1	0.04054 to 0.05554	0.04054 to 0.05554	0.038 to 0.053	0.038 to 0.053	0.038 to 0.053
7	1	0.06061 to 0.08261	0.06061 to 0.08261	0.053 to 0.075	0.053 to 0.075	0.053 to 0.075
8	1	0.08261 to 0.11261	0.08261 to 0.11261	0.075 to 0.105	0.075 to 0.105	0.075 to 0.105
9	1	0.11261 to 0.15361	0.11261 to 0.15361	0.105 to 0.146	0.105 to 0.146	0.105 to 0.146
10	1	0.15361 to 0.21261	0.15361 to 0.21261	0.146 to 0.205	0.146 to 0.205	0.146 to 0.205
11	1	0.21261 to 0.25761	0.21261 to 0.25761	0.205 to 0.250	0.205 to 0.250	0.205 to 0.250
12	1	0.25761 to 0.40361	0.25761 to 0.40361	0.250 to 0.396	0.250 to 0.396	0.250 to 0.396
13	1	0.40361 to 0.50761	0.40361 to 0.50761	0.396 to 0.500	0.396 to 0.500	0.396 to 0.500
14	1	0.50761 to 0.63561	0.50761 to 0.63561	0.500 to 0.628	0.500 to 0.628	0.500 to 0.628
15	1	0.63561 to 1.00761	0.63561 to 1.00761	0.628 to 1.000	0.628 to 1.000	0.628 to 1.000
16	1	1.00761 to 1.50761	1.00761 to 1.50761	1.000 to 1.500	1.000 to 1.500	1.000 to 1.500
17	1	1.50761 to 2.00761	1.50761 to 2.00761	1.500 to 2.000	1.500 to 2.000	1.500 to 2.000
18	1	2.00761 to 3.00761	2.00761 to 3.00761	2.000 to 3.000	2.000 to 3.000	2.000 to 3.000
19	1	3.00761 to 3.20761	3.00761 to 3.20761	3.000 to 3.200	3.000 to 3.200	3.000 to 3.200
20	1	3.20761 to 4.00761	3.20761 to 4.00761	3.200 to 4.000	3.200 to 4.000	3.200 to 4.000
21	1	4.00761 to 5.33961	4.00761 to 5.33961	4.000 to 5.332	4.000 to 5.332	4.000 to 5.332
22	1	5.33961 to 6.75961	5.33961 to 6.75961	5.332 to 6.752	5.332 to 6.752	5.332 to 6.752
23	1	6.75961 to 8.00761	6.75961 to 8.00761	6.752 to 8.000	6.752 to 8.000	6.752 to 8.000
24	1	8.00761 to 8.50761	8.00761 to 8.50761	8.000 to 8.500	8.000 to 8.500	8.000 to 8.500
25	1	8.50761 to 10.67161	8.50761 to 10.67161	8.500 to 10.664	8.500 to 10.664	8.500 to 10.664
26	1	10.67161 to 12.00761	10.67161 to 12.00761	10.664 to 12.000	10.664 to 12.000	10.664 to 12.000
27	1	12.00761 to 12.80761	12.00761 to 12.80761	12.000 to 12.800	12.000 to 12.800	12.000 to 12.800
28	1	12.80761 to 13.51761	12.80761 to 13.51761	12.800 to 13.510	12.800 to 13.510	12.800 to 13.510
29	1	6.75880 to 7.70380	13.51761 to 15.40761	6.755 to 7.700	13.510 to 15.400	13.510 to 15.400
30	1	7.70380 to 8.00380	15.40761 to 16.00761	7.700 to 8.000	15.400 to 16.000	15.400 to 16.000
31	1	8.00380 to 9.50380	16.00761 to 19.00761	8.000 to 9.500	16.000 to 19.000	16.000 to 19.000
32	1	9.50380 to 10.00380	19.00761 to 20.00761	9.500 to 10.000	9.500 to 10.000	19.000 to 20.000
33	1	10.00380 to 10.66761	20.00761 to 21.33961	10.000 to 10.664	10.000 to 10.664	20.000 to 21.328
34	1	10.66761 to 12.00361	21.33961 to 24.00761	10.664 to 12.000	10.664 to 12.000	21.328 to 24.000
35	1	12.00361 to 13.25361	24.00761 to 26.50761	12.000 to 13.250	12.000 to 13.250	24.000 to 26.500
36	3	8.83587 to 9.00520	8.83587 to 9.00520	13.250 to 13.504	13.250 to 13.504	26.500 to 27.008
37	3	9.00520 to 10.66920	9.00520 to 10.66920	8.752 to 8.000	13.504 to 16.000	27.008 to 32.000
38	3	10.66920 to 12.16920	10.66920 to 12.16920	8.000 to 8.125	16.000 to 18.250	32.000 to 36.500
39	3	12.16920 to 13.50254	12.16920 to 13.50254	9.125 to 10.125	18.250 to 20.250	36.500 to 40.500
40	3	6.75127 to 7.71060	13.50254 to 14.22120	10.125 to 10.664	20.250 to 21.328	40.500 to 42.656
41	3	7.71060 to 7.25127	14.22120 to 14.50254	10.664 to 10.875	21.328 to 21.750	42.656 to 43.500
42	3	7.25127 to 7.70127	14.50254 to 15.40254	10.875 to 11.550	21.750 to 23.100	43.500 to 46.200
43	3	7.70127 to 8.00127	15.40254 to 16.00254	11.550 to 12.000	23.100 to 24.000	46.200 to 48.000
44	3	8.00127 to 8.33460	16.00254 to 16.66920	12.000 to 12.500	24.000 to 25.000	48.000 to 50.000

Test Node	Error Description	Assembly	Frequency Band
8	Unleveled, Source 1, Out 1	A5	0.01 - 13.5 GHz
9	Unleveled, Source 1, Out 2	A7	13.5 - 50 GHz
		A5	0.01 - 13.5 GHz
		A8	13.5 - 50 GHz
10	Unleveled, Source 1 Synthesizer	A4	Full Range
11	Unleveled, Source 2, Out 1	A10	0.01 - 13.5 GHz
		A12	13.5 - 50 GHz
12	Unleveled, Source 2, Out 2	A10	0.01 - 13.5 GHz
		A13	13.5 - 50 GHz
13	Unleveled, Source 2 Synthesizer	A17	Full Range
14	Unleveled, LO Dmo	A25	Full Range
15	Unleveled, LO Synthesizer	A15	Full Range
16	Unlocked, Source 1 Synthesizer, Integrator Low	A4	Full Range
17	Unlocked, Source 1 Synthesizer, Integrator High	A4	Full Range
19	Unlocked, Source 2 Synthesizer, Integrator Low	A17	Full Range
20	Unlocked, Source 2 Synthesizer, Integrator High	A17	Full Range
22	Unlocked, LO Synthesizer, Integrator Low	A15	Full Range
23	Unlocked, LO Synthesizer, Integrator High	A15	Full Range
25	Unleveled, Doubler 1 Prelevel	A7	13.5 - 50 GHz
26	Unleveled, Doubler 2 Prelevel	A8	13.5 - 50 GHz
27	Unleveled, Doubler 3 Prelevel	A12	13.5 - 50 GHz
28	Unleveled, Doubler 4 Prelevel	A13	13.5 - 50 GHz
29	Unleveled, Source 1, P4	A5	13.5 - 50 GHz
30	Unleveled, Source 2, P4	A10	13.5 - 50 GHz