

**N5227A 2-Port Overall Block Diagram**  
(Includes Options 200-Standard; 201-Configurable Test Set; and 219-Attenuators and Bias Tees)  
Service Guide: N5227-90001

Band	Miner Block L.O. Harmonic Number	1	2	3	4	5	6
1	1	0.01002 to 0.02383	0.01002 to 0.02383	0.01002 to 0.02383	0.01002 to 0.02383	0.01002 to 0.02383	0.01002 to 0.02383
2	1	0.06044 to 0.12044	0.06044 to 0.12044	0.06044 to 0.12044	0.06044 to 0.12044	0.06044 to 0.12044	0.06044 to 0.12044
3	1	0.18244 to 0.26744	0.18244 to 0.26744	0.18244 to 0.26744	0.18244 to 0.26744	0.18244 to 0.26744	0.18244 to 0.26744
4	1	0.26744 to 0.50744	0.26744 to 0.50744	0.26744 to 0.50744	0.26744 to 0.50744	0.26744 to 0.50744	0.26744 to 0.50744
5	1	0.50744 to 1.00744	0.50744 to 1.00744	0.50744 to 1.00744	0.50744 to 1.00744	0.50744 to 1.00744	0.50744 to 1.00744
6	1	1.00744 to 2.00744	1.00744 to 2.00744	1.00744 to 2.00744	1.00744 to 2.00744	1.00744 to 2.00744	1.00744 to 2.00744
7	1	2.00744 to 3.00744	2.00744 to 3.00744	2.00744 to 3.00744	2.00744 to 3.00744	2.00744 to 3.00744	2.00744 to 3.00744
8	1	3.00744 to 3.20744	3.00744 to 3.20744	3.00744 to 3.20744	3.00744 to 3.20744	3.00744 to 3.20744	3.00744 to 3.20744
9	1	3.20744 to 4.00744	3.20744 to 4.00744	3.20744 to 4.00744	3.20744 to 4.00744	3.20744 to 4.00744	3.20744 to 4.00744
10	1	4.00744 to 5.33944	4.00744 to 5.33944	4.00744 to 5.33944	4.00744 to 5.33944	4.00744 to 5.33944	4.00744 to 5.33944
11	1	5.33944 to 6.79444	5.33944 to 6.79444	5.33944 to 6.79444	5.33944 to 6.79444	5.33944 to 6.79444	5.33944 to 6.79444
12	1	6.79444 to 8.00744	6.79444 to 8.00744	6.79444 to 8.00744	6.79444 to 8.00744	6.79444 to 8.00744	6.79444 to 8.00744
13	1	8.00744 to 10.67444	8.00744 to 10.67444	8.00744 to 10.67444	8.00744 to 10.67444	8.00744 to 10.67444	8.00744 to 10.67444
14	1	10.67444 to 13.51744	10.67444 to 13.51744	10.67444 to 13.51744	10.67444 to 13.51744	10.67444 to 13.51744	10.67444 to 13.51744
15	1	13.51744 to 15.40744	13.51744 to 15.40744	13.51744 to 15.40744	13.51744 to 15.40744	13.51744 to 15.40744	13.51744 to 15.40744
16	1	15.40744 to 16.00744	15.40744 to 16.00744	15.40744 to 16.00744	15.40744 to 16.00744	15.40744 to 16.00744	15.40744 to 16.00744
17	1	16.00744 to 19.00744	16.00744 to 19.00744	16.00744 to 19.00744	16.00744 to 19.00744	16.00744 to 19.00744	16.00744 to 19.00744
18	1	19.00744 to 20.00744	19.00744 to 20.00744	19.00744 to 20.00744	19.00744 to 20.00744	19.00744 to 20.00744	19.00744 to 20.00744
19	1	20.00744 to 21.33944	20.00744 to 21.33944	20.00744 to 21.33944	20.00744 to 21.33944	20.00744 to 21.33944	20.00744 to 21.33944
20	1	21.33944 to 24.00744	21.33944 to 24.00744	21.33944 to 24.00744	21.33944 to 24.00744	21.33944 to 24.00744	21.33944 to 24.00744
21	1	24.00744 to 26.50744	24.00744 to 26.50744	24.00744 to 26.50744	24.00744 to 26.50744	24.00744 to 26.50744	24.00744 to 26.50744
22	1	26.50744 to 27.00744	26.50744 to 27.00744	26.50744 to 27.00744	26.50744 to 27.00744	26.50744 to 27.00744	26.50744 to 27.00744
23	2	8.00744 to 8.00744	8.00744 to 8.00744	8.00744 to 8.00744	8.00744 to 8.00744	8.00744 to 8.00744	8.00744 to 8.00744
24	2	8.00744 to 10.67444	8.00744 to 10.67444	8.00744 to 10.67444	8.00744 to 10.67444	8.00744 to 10.67444	8.00744 to 10.67444
25	2	10.67444 to 13.51744	10.67444 to 13.51744	10.67444 to 13.51744	10.67444 to 13.51744	10.67444 to 13.51744	10.67444 to 13.51744
26	2	13.51744 to 15.40744	13.51744 to 15.40744	13.51744 to 15.40744	13.51744 to 15.40744	13.51744 to 15.40744	13.51744 to 15.40744
27	2	15.40744 to 16.00744	15.40744 to 16.00744	15.40744 to 16.00744	15.40744 to 16.00744	15.40744 to 16.00744	15.40744 to 16.00744
28	2	16.00744 to 19.00744	16.00744 to 19.00744	16.00744 to 19.00744	16.00744 to 19.00744	16.00744 to 19.00744	16.00744 to 19.00744
29	2	19.00744 to 20.00744	19.00744 to 20.00744	19.00744 to 20.00744	19.00744 to 20.00744	19.00744 to 20.00744	19.00744 to 20.00744
30	2	20.00744 to 21.33944	20.00744 to 21.33944	20.00744 to 21.33944	20.00744 to 21.33944	20.00744 to 21.33944	20.00744 to 21.33944
31	3	8.00744 to 8.00744	8.00744 to 8.00744	8.00744 to 8.00744	8.00744 to 8.00744	8.00744 to 8.00744	8.00744 to 8.00744
32	3	8.00744 to 10.67444	8.00744 to 10.67444	8.00744 to 10.67444	8.00744 to 10.67444	8.00744 to 10.67444	8.00744 to 10.67444
33	3	10.67444 to 13.51744	10.67444 to 13.51744	10.67444 to 13.51744	10.67444 to 13.51744	10.67444 to 13.51744	10.67444 to 13.51744
34	3	13.51744 to 15.40744	13.51744 to 15.40744	13.51744 to 15.40744	13.51744 to 15.40744	13.51744 to 15.40744	13.51744 to 15.40744
35	3	15.40744 to 16.00744	15.40744 to 16.00744	15.40744 to 16.00744	15.40744 to 16.00744	15.40744 to 16.00744	15.40744 to 16.00744

Test Node	Error Description	Assembly	Frequency Band
8	Unavailable, Source 1, Out 1	A5	0.01 - 13.5 GHz
		A7	13.5 - 40 GHz
		A29	40 - 70 GHz
9	Unavailable, Source 1, Out 2	A5	0.01 - 13.5 GHz
10	Unavailable, Source 1 Synthesizer	A4	Full Range
11	Unavailable, Source 2, Out 1	A10	0.01 - 13.5 GHz
		A12	13.5 - 40 GHz
		A26	40 - 70 GHz
12	Unavailable, Source 2, Out 2	A10	0.01 - 13.5 GHz
		A13	13.5 - 40 GHz
13	Unavailable, Source 2 Synthesizer	A17	Full Range
14	Unavailable, LO Drive	A25	Full Range
15	Unavailable, LO Synthesizer	A15	Full Range
16	Unavailable, Source 1 Synthesizer, Integrator Low	A4	Full Range
17	Unavailable, Source 1 Synthesizer, Integrator High	A4	Full Range
19	Unavailable, Source 2 Synthesizer, Integrator Low	A17	Full Range
20	Unavailable, Source 2 Synthesizer, Integrator High	A17	Full Range
22	Unavailable, LO Synthesizer, Integrator Low	A15	Full Range
23	Unavailable, LO Synthesizer, Integrator High	A15	Full Range
25	Unavailable, Doubler 1 Plevel	A7	13.5 - 70 GHz
26	Unavailable, Doubler 2 Plevel	A8	13.5 - 70 GHz
27	Unavailable, Doubler 3 Plevel	A12	13.5 - 70 GHz
28	Unavailable, Doubler 4 Plevel	A13	13.5 - 70 GHz
29	Unavailable, Source 1 P4	A5	13.5 - 70 GHz
30	Unavailable, Source 2 P4	A10	13.5 - 70 GHz

