

Frequency Multiplier (Quadrupler)

RKK-4-23+

Typical Performance Data

FREQUENCY (MHz)						RF IN=+11dBm					
						CONV. LOSS (dB) X 4	HARMONIC OUTPUT*				
							X 1	X 2	X 3	X 5	X 6
X 1 OUTPUT	X 2 OUTPUT	X 3 OUTPUT	X 4 OUTPUT	X 5 OUTPUT	X 6 OUTPUT	OUTPUT	OUTPUT	OUTPUT	OUTPUT	OUTPUT	
200	400	600	800	1000	1200	68.57	-10.07	-9.13	2.73	12.72	-30.39
210	420	630	840	1050	1260	63.42	-5.23	-3.58	7.91	10.44	-24.07
220	440	660	880	1100	1320	58.22	-0.37	2.15	13.18	10.49	-18.15
230	460	690	920	1150	1380	53.05	4.56	8.17	18.34	13.53	-11.75
240	480	720	960	1200	1440	47.65	9.69	14.60	23.23	17.62	-4.50
250	500	750	1000	1250	1500	42.48	14.65	20.42	28.79	22.41	3.34
260	520	780	1040	1300	1560	37.04	19.82	26.75	34.36	27.81	14.38
270	540	810	1080	1350	1620	32.31	24.18	31.85	39.02	33.35	22.22
280	560	840	1120	1400	1680	29.49	26.68	34.11	42.30	37.41	18.13
290	580	870	1160	1450	1740	28.35	27.42	34.51	44.06	37.13	18.59
300	600	900	1200	1500	1800	27.65	27.76	34.60	45.41	37.04	21.46
305	610	915	1220	1525	1830	27.30	27.96	34.93	46.19	37.51	22.85
310	620	930	1240	1550	1860	26.93	28.23	35.25	46.80	38.11	23.31
315	630	945	1260	1575	1890	26.65	28.41	35.29	47.13	38.82	23.23
320	640	960	1280	1600	1920	26.27	28.75	35.44	46.96	39.24	23.03
325	650	975	1300	1625	1950	25.95	28.95	35.70	46.39	39.20	22.90
330	660	990	1320	1650	1980	25.74	29.02	35.84	45.50	38.71	23.08
335	670	1005	1340	1675	2010	25.55	29.08	35.82	44.71	37.64	23.44
340	680	1020	1360	1700	2040	25.45	29.06	35.66	44.05	36.39	23.90
345	690	1035	1380	1725	2070	25.33	29.05	35.69	42.56	34.90	24.69
350	700	1050	1400	1750	2100	25.28	29.00	35.66	39.96	32.82	25.69
355	710	1065	1420	1775	2130	25.19	29.15	35.56	37.85	31.09	26.76
360	720	1080	1440	1800	2160	25.26	29.04	35.16	37.33	30.67	27.94
365	730	1095	1460	1825	2190	25.33	28.90	34.95	37.50	30.62	29.14
370	740	1110	1480	1850	2220	25.27	28.86	34.86	38.33	30.62	30.51
375	750	1125	1500	1875	2250	25.34	28.66	34.55	38.52	30.48	31.35
380	760	1140	1520	1900	2280	25.38	28.53	34.31	38.82	30.47	32.14
385	770	1155	1540	1925	2310	25.36	28.39	34.31	39.11	30.30	32.89
390	780	1170	1560	1950	2340	25.32	28.33	34.27	39.37	29.51	30.65
395	790	1185	1580	1975	2370	25.20	28.37	34.17	39.84	29.08	28.24
400	800	1200	1600	2000	2400	25.05	28.50	34.06	40.22	28.91	26.80
413	825	1238	1650	2063	2475	24.81	28.53	34.12	40.60	28.66	25.32
425	850	1275	1700	2125	2550	24.54	28.49	33.52	40.02	28.40	25.22
438	875	1313	1750	2188	2625	24.37	28.30	32.67	39.45	28.29	25.73
450	900	1350	1800	2250	2700	24.23	28.24	31.41	39.88	28.38	26.48
463	925	1388	1850	2313	2775	24.22	27.96	29.78	41.65	28.53	26.26
475	950	1425	1900	2375	2850	24.36	27.26	28.05	46.24	28.68	24.73
488	975	1463	1950	2438	2925	24.60	26.34	25.91	44.43	28.49	23.87
500	1000	1500	2000	2500	3000	24.81	25.80	23.75	38.79	28.73	25.03
513	1025	1538	2050	2563	3075	25.09	24.81	21.24	35.08	29.09	26.71
525	1050	1575	2100	2625	3150	25.49	24.47	18.25	32.07	29.03	30.24
538	1075	1613	2150	2688	3225	25.93	24.06	15.35	29.85	29.05	32.58
550	1100	1650	2200	2750	3300	26.42	23.53	12.43	28.03	29.00	30.10
563	1125	1688	2250	2813	3375	26.85	23.14	9.44	26.51	29.22	27.55
575	1150	1725	2300	2875	3450	27.34	22.63	6.54	25.03	28.71	25.71
588	1175	1763	2350	2938	3525	27.69	22.10	3.98	23.62	28.08	23.01
600	1200	1800	2400	3000	3600	28.05	21.66	1.74	22.28	27.49	21.95

*Harmonic Output below power level of X 4 Output .



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Frequency Multiplier (Quadrupler)

RKK-4-23+

Typical Performance Data

FREQUENCY (MHz)						RF IN=+13dBm					
						CONV. LOSS (dB) X 4	HARMONIC OUTPUT*				
							X 1 OUTPUT	X 2 OUTPUT	X 3 OUTPUT	X 5 OUTPUT	X 6 OUTPUT
X 1 OUTPUT	X 2 OUTPUT	X 3 OUTPUT	X 4 OUTPUT	X 5 OUTPUT	X 6 OUTPUT		X 1 OUTPUT	X 2 OUTPUT	X 3 OUTPUT	X 5 OUTPUT	X 6 OUTPUT
200	400	600	800	1000	1200	66.99	-7.17	-7.68	9.58	9.80	-28.94
210	420	630	840	1050	1260	61.62	-2.12	-1.82	14.80	9.73	-22.04
220	440	660	880	1100	1320	56.43	2.74	3.81	19.70	9.62	-15.80
230	460	690	920	1150	1380	51.31	7.62	9.69	24.45	12.09	-9.00
240	480	720	960	1200	1440	45.89	12.87	15.99	28.86	15.63	-1.51
250	500	750	1000	1250	1500	41.03	17.42	21.31	33.59	19.95	7.17
260	520	780	1040	1300	1560	36.02	22.15	26.97	38.48	24.64	17.51
270	540	810	1080	1350	1620	31.56	26.27	31.58	42.69	29.03	18.84
280	560	840	1120	1400	1680	28.57	28.90	33.97	45.27	32.27	20.63
290	580	870	1160	1450	1740	27.02	30.10	34.92	46.90	32.77	23.44
300	600	900	1200	1500	1800	26.33	30.41	35.12	48.05	31.91	27.02
305	610	915	1220	1525	1830	26.03	30.55	35.42	48.97	31.65	26.61
310	620	930	1240	1550	1860	25.66	30.82	35.72	50.03	31.68	25.10
315	630	945	1260	1575	1890	25.36	31.00	35.86	51.11	32.23	23.79
320	640	960	1280	1600	1920	25.04	31.21	36.00	51.99	32.57	23.06
325	650	975	1300	1625	1950	24.75	31.42	36.26	52.26	32.98	22.77
330	660	990	1320	1650	1980	24.54	31.56	36.42	51.52	33.09	22.83
335	670	1005	1340	1675	2010	24.33	31.66	36.46	49.64	33.16	23.10
340	680	1020	1360	1700	2040	24.28	31.60	36.31	47.74	33.09	23.53
345	690	1035	1380	1725	2070	24.22	31.55	36.30	45.39	32.43	24.22
350	700	1050	1400	1750	2100	24.16	31.48	36.27	42.13	31.27	24.97
355	710	1065	1420	1775	2130	24.18	31.44	36.10	39.38	30.68	25.67
360	720	1080	1440	1800	2160	24.18	31.50	35.88	39.34	31.10	26.50
365	730	1095	1460	1825	2190	24.25	31.35	35.68	40.12	31.35	27.16
370	740	1110	1480	1850	2220	24.29	31.19	35.51	40.42	31.29	27.71
375	750	1125	1500	1875	2250	24.30	31.08	35.23	40.08	31.23	28.12
380	760	1140	1520	1900	2280	24.32	30.95	35.05	39.46	31.19	28.53
385	770	1155	1540	1925	2310	24.41	30.73	35.00	38.71	30.94	29.03
390	780	1170	1560	1950	2340	24.38	30.63	34.87	38.10	30.13	27.99
395	790	1185	1580	1975	2370	24.33	30.55	34.77	37.85	29.57	26.47
400	800	1200	1600	2000	2400	24.28	30.58	34.63	37.55	29.32	25.46
413	825	1238	1650	2063	2475	24.17	30.45	34.54	36.83	28.75	24.27
425	850	1275	1700	2125	2550	24.13	30.16	33.92	36.43	28.35	24.22
438	875	1313	1750	2188	2625	24.14	29.86	33.19	36.48	27.94	25.88
450	900	1350	1800	2250	2700	24.26	29.61	32.20	37.25	27.54	29.39
463	925	1388	1850	2313	2775	24.53	28.96	31.07	38.93	27.29	32.62
475	950	1425	1900	2375	2850	24.87	28.16	29.87	40.97	27.08	31.88
488	975	1463	1950	2438	2925	25.24	27.12	28.30	37.95	26.60	30.65
500	1000	1500	2000	2500	3000	25.68	25.96	26.12	34.15	26.76	30.08
513	1025	1538	2050	2563	3075	26.18	24.88	23.28	31.39	27.13	29.42
525	1050	1575	2100	2625	3150	26.78	24.47	20.16	29.06	27.55	29.21
538	1075	1613	2150	2688	3225	27.36	23.86	17.21	27.36	27.85	28.82
550	1100	1650	2200	2750	3300	28.08	23.11	14.15	25.82	27.69	26.52
563	1125	1688	2250	2813	3375	28.70	22.58	10.72	24.47	27.27	23.96
575	1150	1725	2300	2875	3450	29.37	21.95	7.13	23.15	25.92	20.51
588	1175	1763	2350	2938	3525	29.90	21.22	3.91	21.85	24.78	18.19
600	1200	1800	2400	3000	3600	30.46	20.63	1.13	20.48	23.74	17.32

*Harmonic Output below power level of X 4 Output .



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Frequency Multiplier (Quadrupler)

RKK-4-23+

Typical Performance Data

FREQUENCY (MHz)						RF IN=+15dBm					
						CONV. LOSS (dB) X 4	HARMONIC OUTPUT*				
							X 1 OUTPUT	X 2 OUTPUT	X 3 OUTPUT	X 5 OUTPUT	X 6 OUTPUT
X 1 OUTPUT	X 2 OUTPUT	X 3 OUTPUT	X 4 OUTPUT	X 5 OUTPUT	X 6 OUTPUT	X 1 OUTPUT	X 2 OUTPUT	X 3 OUTPUT	X 5 OUTPUT	X 6 OUTPUT	
200	400	600	800	1000	1200	65.75	-4.92	-5.78	11.54	25.56	-26.89
210	420	630	840	1050	1260	60.32	0.21	0.08	17.87	13.76	-19.73
220	440	660	880	1100	1320	55.30	4.84	5.29	23.65	18.94	-12.98
230	460	690	920	1150	1380	50.37	9.55	10.79	29.35	10.60	-4.78
240	480	720	960	1200	1440	45.19	14.54	16.91	34.36	13.10	5.62
250	500	750	1000	1250	1500	40.67	18.80	22.07	38.87	17.30	17.89
260	520	780	1040	1300	1560	36.01	23.17	27.12	42.91	22.45	19.55
270	540	810	1080	1350	1620	31.62	27.24	31.41	45.16	28.51	23.56
280	560	840	1120	1400	1680	28.34	30.20	34.00	46.68	31.73	24.75
290	580	870	1160	1450	1740	26.58	31.54	35.13	47.95	30.98	26.62
300	600	900	1200	1500	1800	25.69	32.09	35.42	48.83	29.87	37.63
305	610	915	1220	1525	1830	25.39	32.23	35.75	49.74	29.03	38.81
310	620	930	1240	1550	1860	25.07	32.36	35.97	50.64	28.58	31.40
315	630	945	1260	1575	1890	24.78	32.45	36.04	51.71	28.72	28.13
320	640	960	1280	1600	1920	24.49	32.70	36.15	53.13	29.02	26.27
325	650	975	1300	1625	1950	24.29	32.77	36.32	55.10	29.62	25.36
330	660	990	1320	1650	1980	24.13	32.82	36.44	58.48	30.17	25.03
335	670	1005	1340	1675	2010	24.02	32.98	36.35	65.96	30.87	25.07
340	680	1020	1360	1700	2040	23.95	32.94	36.20	61.74	31.54	25.25
345	690	1035	1380	1725	2070	23.95	32.81	36.13	49.78	31.55	25.79
350	700	1050	1400	1750	2100	25.04	31.50	34.98	43.15	29.58	25.30
355	710	1065	1420	1775	2130	23.96	32.74	35.95	41.46	30.36	27.20
360	720	1080	1440	1800	2160	24.01	32.75	35.63	39.65	30.79	28.01
365	730	1095	1460	1825	2190	24.17	32.51	35.48	38.36	31.20	28.67
370	740	1110	1480	1850	2220	24.19	32.39	35.37	37.62	31.45	29.17
375	750	1125	1500	1875	2250	24.27	32.23	35.03	37.06	31.55	29.16
380	760	1140	1520	1900	2280	24.38	32.05	34.79	36.74	31.65	29.13
385	770	1155	1540	1925	2310	24.50	31.78	34.64	36.00	31.39	29.40
390	780	1170	1560	1950	2340	24.60	31.50	34.62	35.39	30.46	28.03
395	790	1185	1580	1975	2370	24.61	31.45	34.47	34.75	29.84	26.40
400	800	1200	1600	2000	2400	24.59	31.42	34.32	34.27	29.48	25.26
413	825	1238	1650	2063	2475	24.62	31.20	34.20	33.90	28.58	23.59
425	850	1275	1700	2125	2550	24.72	30.64	33.59	34.33	27.77	23.32
438	875	1313	1750	2188	2625	24.81	30.20	33.15	35.09	27.18	24.92
450	900	1350	1800	2250	2700	25.04	29.90	32.51	36.06	26.57	28.27
463	925	1388	1850	2313	2775	25.33	29.28	32.13	36.73	26.29	32.76
475	950	1425	1900	2375	2850	25.67	28.48	31.61	35.95	26.34	36.63
488	975	1463	1950	2438	2925	26.04	27.39	30.40	32.60	26.39	33.37
500	1000	1500	2000	2500	3000	26.54	26.04	28.27	30.25	27.07	30.14
513	1025	1538	2050	2563	3075	26.87	25.14	25.58	28.22	28.54	28.32
525	1050	1575	2100	2625	3150	27.44	24.56	22.29	27.44	29.90	27.77
538	1075	1613	2150	2688	3225	27.99	24.10	19.50	25.25	30.72	28.25
550	1100	1650	2200	2750	3300	28.53	23.56	16.55	24.20	30.57	27.37
563	1125	1688	2250	2813	3375	29.07	23.19	12.80	23.49	29.04	24.62
575	1150	1725	2300	2875	3450	29.66	22.73	8.69	22.55	26.70	21.24
588	1175	1763	2350	2938	3525	30.15	22.13	5.17	21.66	25.18	19.22
600	1200	1800	2400	3000	3600	30.57	21.69	2.34	20.75	24.34	18.41

*Harmonic Output below power level of X 4 Output .



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