

## HIGHER-ORDER ACTIVE MULTIPLIERS

MODEL NUMBER	INPUT FREQUENCY (GHz)	INPUT POWER (dBm)	OUTPUT FREQUENCY (GHz)	OUTPUT POWER (dBm, Typ.)	CONVERSION GAIN (dB, Typ.)	HARMONIC REJECTION IN/OUT (dBc, Min.)	POWER FLATNESS (±dB, Typ.)	VSWR IN/OUT (Typ.)	NOM. DC POWER (+15 V, mA)	OUTLINE NUMBER
<b>QUADRUPLERS</b>										
MAX4J050055	1.25 – 1.375	3 – 8	5 – 5.5	6 – 11	3	-50 / -15	1	2:1 / 1.5:1	150	MAX4A
MAX4M050055 *	1.25 – 1.375	8 – 12	5 – 5.5	11 – 15	3	-50 / -15	1	2:1 / 1.5:1	150	MAX4A
MAX4H050055	1.25 – 1.375	12 – 16	5 – 5.5	12 – 16	0	-50 / -15	1	2:1 / 1.5:1	150	MAX4A
MAX4J055060	1.375 – 1.5	3 – 8	5.5 – 6	6 – 11	3	-50 / -15	1	2:1 / 1.5:1	150	MAX4A
MAX4M055060	1.375 – 1.5	8 – 12	5.5 – 6	11 – 15	3	-50 / -15	1	2:1 / 1.5:1	150	MAX4A
MAX4H055060	1.375 – 1.5	12 – 16	5.5 – 6	12 – 16	0	-50 / -15	1	2:1 / 1.5:1	150	MAX4A
MAX4J060065	1.5 – 1.625	3 – 8	6 – 6.5	6 – 11	3	-50 / -15	1	2:1 / 1.5:1	150	MAX4A
MAX4M060065	1.5 – 1.625	8 – 12	6 – 6.5	11 – 15	3	-50 / -15	1	2:1 / 1.5:1	150	MAX4A
MAX4H060065	1.5 – 1.625	12 – 16	6 – 6.5	12 – 16	0	-50 / -15	1	2:1 / 1.5:1	150	MAX4A
MAX4M062071 *	1.55 – 1.78	8 – 12	6.2 – 7.1	11 – 15	3	-50 / -15	2	2:1 / 1.5:1	150	MAX4A
MAX4J065070	1.625 – 1.75	3 – 8	6.5 – 7	6 – 11	3	-50 / -15	1	2:1 / 1.5:1	150	MAX4A
MAX4M065070	1.625 – 1.75	8 – 12	6.5 – 7	11 – 15	3	-50 / -15	1	2:1 / 1.5:1	150	MAX4A
MAX4H065070	1.625 – 1.75	12 – 16	6.5 – 7	12 – 16	0	-50 / -15	1	2:1 / 1.5:1	150	MAX4A
MAX4J070075	1.75 – 1.875	3 – 8	7 – 7.5	6 – 11	3	-50 / -15	1	2:1 / 1.5:1	150	MAX4A
MAX4M070075	1.75 – 1.875	8 – 12	7 – 7.5	11 – 15	3	-50 / -15	1	2:1 / 1.5:1	150	MAX4A
MAX4H070075	1.75 – 1.875	12 – 16	7 – 7.5	12 – 16	0	-50 / -15	1	2:1 / 1.5:1	150	MAX4A
MAX4M400480 *	10 – 12	10 – 15	40 – 48	8 – 11	0	18 / 18	2	3:1 / 2.5:1	150	MAX2H
<b>QUINTUPLERS</b>										
MAX5M65075 *	1.3 – 1.5	8 – 12	6.5 – 7.5	11 – 15	3	-40 / -15	1.5	2:1 / 1.5:1	150	MAX5A
MAX5J085090	1.7 – 1.8	3 – 8	8.5 – 9	6 – 11	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5M085090	1.7 – 1.8	8 – 12	8.5 – 9	11 – 15	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5H085090	1.7 – 1.8	12 – 16	8.5 – 9	12 – 16	0	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5J090095	1.8 – 1.9	3 – 8	9 – 9.5	6 – 11	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5M090095	1.8 – 1.9	8 – 12	9 – 9.5	11 – 15	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5H090095	1.8 – 1.9	12 – 16	9 – 9.5	12 – 16	0	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5J095105	1.9 – 2.1	3 – 8	9.5 – 10.5	6 – 11	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5M095105	1.9 – 2.1	8 – 12	9.5 – 10.5	11 – 15	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5H095105	1.9 – 2.1	12 – 16	9.5 – 10.5	12 – 16	0	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5J105115	2.1 – 2.3	3 – 8	10.5 – 11.5	6 – 11	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5M105115	2.1 – 2.3	8 – 12	10.5 – 11.5	11 – 15	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5H105115	2.1 – 2.3	12 – 16	10.5 – 11.5	12 – 16	0	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5J115125	2.3 – 2.5	3 – 8	11.5 – 12.5	6 – 11	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5M115125	2.3 – 2.5	8 – 12	11.5 – 12.5	11 – 15	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5H115125	2.3 – 2.5	12 – 16	11.5 – 12.5	12 – 16	0	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5J125135	2.5 – 2.7	3 – 8	12.5 – 13.5	6 – 11	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5M125135	2.5 – 2.7	8 – 12	12.5 – 13.5	11 – 15	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5H125135	2.5 – 2.7	12 – 16	12.5 – 13.5	12 – 16	0	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5J135145	2.7 – 2.9	3 – 8	13.5 – 14.5	6 – 11	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5M135145	2.7 – 2.9	8 – 12	13.5 – 14.5	11 – 15	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5H135145	2.7 – 2.9	12 – 16	13.5 – 14.5	12 – 16	0	-60 / -15	1	2:1 / 1.5:1	150	MAX5A

\* Complete data sheet available inside catalog.

## HIGHER-ORDER ACTIVE MULTIPLIERS (CONT.)

MODEL NUMBER	INPUT FREQUENCY (GHz)	INPUT POWER (dBm)	OUTPUT FREQUENCY (GHz)	OUTPUT POWER (dBm, Typ.)	CONVERSION GAIN (dB, Typ.)	HARMONIC REJECTION IN/OUT (dBc, Min.)	POWER FLATNESS ( $\pm$ dB, Typ.)	VSWR IN/OUT (Typ.)	NOM. DC POWER (+15 V, mA)	OUTLINE NUMBER
<b>QUINTUPLERS (CONT.)</b>										
MAX5J114127	2.28 – 2.56	3 – 8	11.4 – 12.8	6 – 11	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5M114127	2.28 – 2.56	8 – 12	11.4 – 12.8	11 – 15	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5H114127	2.28 – 2.56	12 – 16	11.4 – 12.8	12 – 16	0	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5J127142	2.54 – 2.84	3 – 8	12.7 – 14.2	6 – 11	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5M127142	2.54 – 2.84	8 – 12	12.7 – 14.2	11 – 15	3	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
MAX5H127142	2.54 – 2.84	12 – 16	12.7 – 14.2	12 – 16	0	-60 / -15	1	2:1 / 1.5:1	150	MAX5A
<b>FREQUENCY X 6</b>										
MAX6M126132 *	2.1 – 2.2	10	12.6 – 13.2	20	10	-60 / -15	1	2:1 / 1.5:1	450	**
<b>FREQUENCY X 8</b>										
MAX8S070070	0.875	10	7	-2	-12	-65 / -50	N/A	2:1 / 1.5:1	450	**
MAX8M080085	1.0 – 1.06	10	8 – 8.5	14	4	-50 / -15	1.5	2:1 / 1.5:1	450	**
<b>FREQUENCY X 10</b>										
MAX10M093098	0.93 – 0.98	10	9.3 – 9.8	10	0	-50 / -15	1.5	2:1 / 1.5:1	450	**
<b>FREQUENCY X 12</b>										
MAX12M009009	0.081 – 0.082	8 – 12	0.972 – 0.984	8 – 12	0	-60 / -15	1	2:1 / 1.5:1	450	**
<b>FREQUENCY X 13</b>										
MAX13M104104	0.8	10	10.4	15	5	-50 / -50	N/A	2.5:1 / 2:1	450	**
<b>FREQUENCY X 16</b>										
MAX16S013015 *	0.085 – 0.097	-12	1.36 – 1.56	20	32	-60 / -15	1	2:1 / 1.5:1	550	**
MAX16J064069 *	0.397 – 0.428	7	6.36 – 6.86	20	13	-60 / -40	1	2:1 / 2:1	550	**
<b>FREQUENCY X 32</b>										
MAX32S027029 *	0.085 – 0.092	-10	2.7 – 2.94	10	20	-60 / -50	1.5	2:1 / 1.5:1	550	**
<b>FREQUENCY X 48</b>										
MAX48S029031	0.062 – 0.063	10	2.976 – 3.024	-10	-20	-60 / -15	1	2:1 / 1.5:1	550	**
<b>FREQUENCY X 64</b>										
MAX64M068068	0.106	10	6.784	15	5	-50 / -15	N/A	2.5:1 / 1.5:1	550	**

\* Complete data sheet available inside catalog.

\*\* Consult factory for specific packaging information.

## HIGHER-ORDER ACTIVE MULTIPLIERS (CONT.)

MODEL NUMBER	INPUT FREQUENCY (GHz)	OUTPUT FREQUENCY (GHz)	INPUT/OUTPUT POWER (dBm)	CONVERSION GAIN (dB, Typ.)	VOLTAGE CURRENT (+V, -V, mA)	HARMONIC REJECTION IN/OUT (dBc, Min.)	POWER FLATNESS ( $\pm$ dB, Typ.)	VSWR IN/OUT (Typ.)	OUTLINE NUMBER
<b>CFS STANDARD</b>									
MAX2M045055	2.25 – 2.78	4.5 – 5.58	8 – 10	0	+5, 120	-65 / -15	1.5	2:1 / 2:1	MAX2D
MAX2M055059	2.75 – 2.94	5.51 – 5.59	8 – 10	0	+5, 120	-65 / -15	1.5	2:1 / 2:1	MAX2D
MAX4M088095	2.2 – 2.37	8.88 – 9.48	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	MAX4B
MAX4M109115	2.73 – 2.88	10.91 – 11.53	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	MAX4B
MAX4M114120	2.86 – 3.01	11.46 – 12.03	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	MAX4B
MAX4M114126	2.86 – 3.14	11.46 – 12.57	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	MAX4B
MAX4M124133	3.11 – 3.32	12.46 – 13.28	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	MAX4B
MAX4M127134	3.17 – 3.32	12.71 – 13.3	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	MAX4B
MAX4M127148	3.18 – 3.85	12.72 – 14.84	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	MAX4C
MAX4M129138	3.24 – 3.45	12.97 – 13.79	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	MAX4B
MAX4M139144	3.48 – 3.61	13.95 – 14.46	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	MAX4C
MAX4M144146	3.61 – 3.65	14.4 – 14.66	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	MAX4C
MAX4M145154	3.62 – 4.22	14.5 – 15.4	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	MAX4C
MAX4M150162	3.75 – 4.05	15 – 16.17	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	MAX4C
MAX4M152163	3.8 – 4.08	15.21 – 16.31	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	MAX4C
MAX4M160169	4 – 4.22	16 – 16.9	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	MAX4C

MODEL NUMBER	INPUT FREQUENCY (GHz)	OUTPUT FREQUENCY (GHz)	INPUT/OUTPUT POWER (dBm)	CONVERSION GAIN (dBm, Typ.)	VOLTAGE CURRENT (+V, -V, mA)	HARMONIC REJECTION IN/OUT (dB)	POWER FLATNESS ( $\pm$ dB, Typ.)	VSWR IN/OUT (Typ.)	COUPLED PORT PWR RANGE (dB)*	OUTLINE NUMBER
<b>CFS 9700</b>										
MAX2M04055-C	2.25 – 2.78	4.5 – 5.58	8 – 10	0	+5, 120	-65 / -15	1.5	2:1 / 2:1	-17 to -23	MAX2E
MAX2M055059-C	2.75 – 2.94	5.51 – 5.59	8 – 10	0	+5, 120	-65 / -15	1.5	2:1 / 2:1	-17 to -23	MAX2E
MAX4M104110-C	2.6 – 2.75	10.4 – 11	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	-17 to -23	MAX4D
MAX4M114126-C	2.86 – 3.14	11.46 – 12.57	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	-17 to -23	MAX4D
MAX4M127148-C	3.18 – 3.85	12.72 – 14.84	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	-17 to -23	MAX4E
MAX4M150162-C	3.75 – 4.05	15 – 16.17	8 – 10	0	+5, -2.5, 120	-65 / -15	1.5	2:1 / 2:1	-17 to -23	MAX4E

\* Used to monitor main port