

# Frequency Multiplier (Doublers)

# KSX2-442+

## Typical Performance Data

Frequency (MHz)				RF IN = 7dBm			
				Conversion Loss (dB)	Harmonic Output* (-dBc)		
X1 Output	X2 Output	X3 Output	X4 Output	X2 Output	X1 Output	X3 Output	X4 Output
600.00	1200.00	1800.00	2400.00	11.07	37.78	38.89	19.27
700.00	1400.00	2100.00	2800.00	10.62	35.69	33.05	20.55
725.00	1450.00	2175.00	2900.00	10.96	33.61	32.98	18.42
750.00	1500.00	2250.00	3000.00	10.81	31.77	34.21	16.56
775.00	1550.00	2325.00	3100.00	11.11	30.55	34.97	15.48
800.00	1600.00	2400.00	3200.00	10.80	29.63	36.19	14.47
825.00	1650.00	2475.00	3300.00	10.56	29.39	36.48	14.11
850.00	1700.00	2550.00	3400.00	10.45	29.55	36.57	14.68
875.00	1750.00	2625.00	3500.00	10.06	29.91	37.08	15.22
900.00	1800.00	2700.00	3600.00	10.20	29.93	37.43	15.88
950.00	1900.00	2850.00	3800.00	10.39	29.32	37.16	16.42
1000.00	2000.00	3000.00	4000.00	10.82	28.26	33.82	16.84
1100.00	2200.00	3300.00	4400.00	11.80	27.05	29.27	19.07
1150.00	2300.00	3450.00	4600.00	11.86	27.42	28.19	20.03
1200.00	2400.00	3600.00	4800.00	12.57	26.52	29.22	20.14

\*Harmonic Output below power level of X2 Output.

Frequency (MHz)				RF IN = 13dBm			
				Conversion Loss (dB)	Harmonic Output* (-dBc)		
X1 Output	X2 Output	X3 Output	X4 Output	X2 Output	X1 Output	X3 Output	X4 Output
600.00	1200.00	1800.00	2400.00	11.42	36.83	37.22	17.78
700.00	1400.00	2100.00	2800.00	11.38	30.55	43.10	15.17
725.00	1450.00	2175.00	2900.00	11.82	29.27	46.76	14.44
750.00	1500.00	2250.00	3000.00	11.53	28.24	54.28	13.86
775.00	1550.00	2325.00	3100.00	11.73	27.98	51.80	13.59
800.00	1600.00	2400.00	3200.00	11.25	27.69	48.85	13.72
825.00	1650.00	2475.00	3300.00	11.05	27.58	45.69	14.42
850.00	1700.00	2550.00	3400.00	11.26	27.56	44.52	15.79
875.00	1750.00	2625.00	3500.00	11.19	27.21	43.53	17.71
900.00	1800.00	2700.00	3600.00	11.71	26.98	44.51	18.04
950.00	1900.00	2850.00	3800.00	11.85	25.83	41.50	19.39
1000.00	2000.00	3000.00	4000.00	12.03	24.49	42.41	17.55
1100.00	2200.00	3300.00	4400.00	11.45	23.40	42.59	25.36
1150.00	2300.00	3450.00	4600.00	11.17	22.65	36.52	23.32
1200.00	2400.00	3600.00	4800.00	11.57	22.07	34.21	19.68

\*Harmonic Output below power level of X2 Output.



P.O. Box 350186, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4861 For detailed performance specs & shopping online see Mini-Circuits web site



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# Frequency Multiplier (Doublers)

# KSX2-442+

## Typical Performance Data

Frequency (MHz)				RF IN = 10dBm			
				Conversion Loss (dB)	Harmonic Output* (-dBc)		
X1 Output	X2 Output	X3 Output	X4 Output	X2 Output	X1 Output	X3 Output	X4 Output
1200.00	2400.00	3600.00	4800.00	11.62	24.39	34.69	18.76
1300.00	2600.00	3900.00	5200.00	11.46	24.74	36.51	17.80
1400.00	2800.00	4200.00	5600.00	11.53	21.40	32.39	15.23
1500.00	3000.00	4500.00	6000.00	10.85	20.20	27.53	18.33
1600.00	3200.00	4800.00	6400.00	10.28	20.96	28.80	23.83
1700.00	3400.00	5100.00	6800.00	10.54	21.05	27.62	25.30
1800.00	3600.00	5400.00	7200.00	10.48	21.09	30.11	44.00
1850.00	3700.00	5550.00	7400.00	10.88	20.35	33.46	35.37
1900.00	3800.00	5700.00	7600.00	11.08	19.22	52.15	31.03
1950.00	3900.00	5850.00	7800.00	11.51	17.74	34.22	44.11
2000.00	4000.00	6000.00	8000.00	11.71	17.28	28.56	39.52
2050.00	4100.00	6150.00	8200.00	11.94	16.57	28.40	37.40
2100.00	4200.00	6300.00	8400.00	12.09	16.42	30.20	39.12
2150.00	4300.00	6450.00	8600.00	12.19	16.62	29.11	34.90
2200.00	4400.00	6600.00	8800.00	12.36	16.51	30.27	36.11

\*Harmonic Output below power level of X2 Output.

Frequency (MHz)				RF IN = 15dBm			
				Conversion Loss (dB)	Harmonic Output* (-dBc)		
X1 Output	X2 Output	X3 Output	X4 Output	X2 Output	X1 Output	X3 Output	X4 Output
1200.00	2400.00	3600.00	4800.00	11.98	20.99	32.59	22.26
1300.00	2600.00	3900.00	5200.00	11.66	20.99	34.74	19.84
1400.00	2800.00	4200.00	5600.00	11.19	18.65	35.06	17.29
1500.00	3000.00	4500.00	6000.00	10.89	17.25	34.00	21.23
1600.00	3200.00	4800.00	6400.00	10.47	17.46	49.70	20.69
1700.00	3400.00	5100.00	6800.00	10.45	16.88	31.19	28.07
1800.00	3600.00	5400.00	7200.00	10.93	16.93	25.40	46.31
1850.00	3700.00	5550.00	7400.00	11.45	17.22	24.89	37.47
1900.00	3800.00	5700.00	7600.00	11.37	17.27	28.09	33.16
1950.00	3900.00	5850.00	7800.00	11.16	16.02	35.11	50.14
2000.00	4000.00	6000.00	8000.00	11.37	14.87	44.49	45.20
2050.00	4100.00	6150.00	8200.00	11.59	14.04	42.35	38.11
2100.00	4200.00	6300.00	8400.00	11.78	13.87	39.30	38.07
2150.00	4300.00	6450.00	8600.00	11.76	14.22	37.34	29.99
2200.00	4400.00	6600.00	8800.00	11.50	14.00	36.61	29.03

\*Harmonic Output below power level of X2 Output.



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