

# Frequency Multiplier (Doublers)

# CY2-143+

## Typical Performance Data

Frequency (MHz)				RF IN = 12dBm			
				Conversion Loss (dB)	Harmonic Output* (-dBc)		
X1 Output	X2 Output	X3 Output	X4 Output	X2 Output	X1 Output	X3 Output	X4 Output
2000	4000	6000	8000	12.51	40.92	33.76	15.87
2500	5000	7500	10000	10.53	37.94	37.00	14.66
3000	6000	9000	12000	11.08	33.46	37.04	15.55
3500	7000	10500	14000	12.38	28.64	35.79	16.22
4000	8000	12000	16000	11.79	30.37	38.63	25.62
4500	9000	13500	18000	12.96	26.72	36.23	38.06
4750	9500	14250	19000	13.13	26.39	36.75	40.80
5000	10000	15000	20000	14.02	26.78	38.07	38.98
5250	10500	15750	21000	14.28	27.98	49.62	28.39
5500	11000	16500	22000	14.73	29.00	60.05	20.95
5750	11500	17250	23000	15.24	29.17	48.47	21.47
6000	12000	18000	24000	13.82	30.24	42.36	29.24
6250	12500	18750	25000	13.95	29.08	45.37	35.00
6500	13000	19500	26000	13.23	28.77	42.70	33.39
6750	13500	20250	27000	14.46	26.94	41.63	34.68
7000	14000	21000	28000	15.86	26.02	39.73	32.68

\*Harmonic Output below power level of X2 Output .

Frequency (MHz)				RF IN = 18dBm			
				Conversion Loss (dB)	Harmonic Output* (-dBc)		
X1 Output	X2 Output	X3 Output	X4 Output	X2 Output	X1 Output	X3 Output	X4 Output
2000	4000	6000	8000	13.75	30.50	22.90	14.10
2500	5000	7500	10000	12.11	26.75	24.89	16.92
3000	6000	9000	12000	11.39	25.83	24.69	22.32
3500	7000	10500	14000	11.95	22.50	24.04	17.78
4000	8000	12000	16000	11.68	23.85	27.03	21.81
4500	9000	13500	18000	12.06	22.28	28.45	28.64
4750	9500	14250	19000	12.30	22.55	30.69	26.12
5000	10000	15000	20000	12.74	23.84	33.88	22.71
5250	10500	15750	21000	12.32	27.27	38.61	21.76
5500	11000	16500	22000	11.95	30.39	43.81	19.50
5750	11500	17250	23000	12.57	32.24	49.94	18.66
6000	12000	18000	24000	11.98	33.03	46.20	23.98
6250	12500	18750	25000	12.12	31.30	45.25	28.35
6500	13000	19500	26000	12.64	29.29	42.22	30.69
6750	13500	20250	27000	14.18	26.93	38.24	32.55
7000	14000	21000	28000	16.02	25.38	37.86	31.60

\*Harmonic Output below power level of X2 Output .



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 • Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site  
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IF/RF MICROWAVE COMPONENTS

REV. OR  
 CY2-143+  
 1/22/2016  
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