

Frequency Mixer

GRA-1H

Typical Performance Data

RF (MHz)	LO (MHz)	CONVERSION LOSS (dB)			LO (MHz)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)		
		@LO (dBm)				@LO (dBm)			@LO (dBm)		
		+4	+7	+10		+4	+7	+10	+4	+7	+10
0.5	30.5	7.59	7.38	7.34	0.5	67.8	64.7	63.3	63.6	58.3	55.1
2.0	32.0	6.46	6.29	6.29	2.0	64.6	62.8	62.0	61.5	57.0	54.1
10.0	40.0	6.01	5.89	5.94	10.0	59.8	58.8	57.7	56.4	53.9	51.9
20.0	50.0	6.09	5.93	5.96	20.0	53.5	51.8	50.6	49.0	47.6	46.2
50.0	80.0	6.02	5.91	6.00	50.0	49.6	48.1	47.4	45.6	44.5	43.3
81.1	51.1	5.94	5.84	5.90	81.1	44.9	43.9	43.7	41.4	40.8	39.8
100.0	70.0	5.91	5.82	5.91	100.0	43.6	42.5	42.4	40.1	39.4	38.6
129.4	99.4	5.89	5.85	5.94	129.4	42.7	41.8	41.3	39.4	38.7	37.9
161.6	131.6	5.93	5.90	5.99	161.6	40.7	39.9	39.6	37.8	37.1	36.2
193.9	163.9	6.06	5.98	6.04	193.9	39.5	38.7	38.1	36.3	35.7	34.6
226.1	196.1	6.18	6.10	6.16	226.1	38.7	38.3	37.9	36.0	35.4	34.3
258.3	228.3	6.10	6.01	6.05	258.3	37.8	37.2	36.5	35.3	34.2	32.9
274.4	244.4	6.08	5.97	6.03	274.4	37.4	36.6	35.9	33.7	33.2	32.2
306.7	276.7	6.14	6.07	6.17	306.7	36.3	35.8	35.3	33.2	32.4	31.6
338.9	308.9	6.21	6.16	6.27	338.9	36.0	34.8	34.1	31.9	31.0	30.1
371.1	341.1	6.50	6.34	6.34	371.1	35.5	33.9	32.9	31.0	29.5	28.5
403.3	373.3	6.61	6.42	6.39	403.3	36.3	33.8	32.1	30.4	28.5	27.6
435.6	405.6	6.86	6.60	6.39	435.6	37.5	34.5	32.4	29.8	28.2	26.7
435.6	437.8	7.03	6.76	6.62	435.6	38.2	35.6	33.4	28.6	28.5	26.9
500.0	470.0	7.17	6.85	6.62	500.0	36.6	35.0	33.7	29.8	28.7	27.0

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IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 CERTIFIED RoHS compliant
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Typical Performance Data

RF/LO (MHz)	RF VSWR (:1)			LO VSWR (:1)			IF (MHz)	IF VSWR (:1)			LO/RF (MHz)	max. DC output (mV)	DC Offset (mV)
	@LO (dBm)			@LO (dBm)				@LO (dBm)			@LO (dBm)		
	+4	+7	+10	+4	+7	+10		+4	+7	+10	+7		
5.0	1.23	1.26	1.28	1.95	2.93	4.04	5.0	1.47	1.30	1.17	0.5	-671.8	-1.35
10.0	1.10	1.13	1.17	1.89	2.80	3.90	10.0	1.47	1.30	1.18	1.0	-709.8	-1.42
20.0	1.02	1.08	1.14	1.81	2.61	3.52	20.0	1.46	1.30	1.18	10.0	-720.2	-0.69
34.1	1.02	1.09	1.15	1.84	2.57	3.35	34.1	1.45	1.29	1.18	34.1	-715.9	-0.67
50.0	1.03	1.10	1.16	1.85	2.57	3.39	50.0	1.46	1.31	1.19	50.2	-718.2	-0.65
77.8	1.05	1.12	1.17	1.88	2.72	3.76	77.8	1.52	1.35	1.23	82.3	-723.7	-0.52
100.0	1.06	1.12	1.18	1.80	2.57	3.33	100.0	1.55	1.38	1.26	100.0	-717.9	-0.49
136.0	1.08	1.14	1.19	1.77	2.45	3.12	136.0	1.59	1.43	1.31	130.5	-721.8	-0.72
165.2	1.10	1.16	1.21	1.84	2.59	3.32	165.2	1.68	1.51	1.38	162.7	-704.2	-1.05
194.3	1.12	1.17	1.22	1.76	2.39	2.99	194.3	1.72	1.56	1.42	194.8	-706.0	-1.53
208.8	1.13	1.18	1.23	1.76	2.34	2.95	208.8	1.74	1.59	1.45	210.9	-708.2	-1.56
252.5	1.18	1.24	1.28	1.87	2.56	3.19	252.5	1.90	1.73	1.57	243.0	-718.0	-1.83
281.6	1.20	1.26	1.30	1.80	2.43	3.06	281.6	1.94	1.77	1.61	275.1	-723.3	-2.91
310.7	1.24	1.26	1.33	1.83	2.47	3.11	310.7	1.95	1.80	1.64	307.2	-706.6	-3.24
339.9	1.28	1.33	1.39	1.92	2.54	3.15	339.9	2.14	1.95	1.75	339.4	-674.2	-3.34
369.0	1.30	1.34	1.38	1.89	2.45	2.99	369.0	2.14	1.95	1.75	371.5	-642.8	-3.19
393.1	1.33	1.36	1.41	1.95	2.59	3.21	393.1	2.16	1.97	1.78	403.6	-613.3	-3.29
441.8	1.37	1.39	1.44	1.88	2.55	3.12	441.8	2.27	2.11	1.86	435.8	-597.9	-3.37
470.9	1.37	1.40	1.45	1.91	2.52	3.06	470.9	2.21	2.07	1.83	467.9	-600.2	-5.58
500.0	1.40	1.42	1.47	1.92	2.52	3.10	500.0	2.30	2.17	1.88	500.0	-604.1	-3.89

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