

Frequency Mixer

SBL-1H+

Typical Performance Data

RF (MHz)	LO (MHz)	CONVERSION LOSS (dB)			LO (MHz)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)			LO (MHz)	RF (MHz)	IP3 Input (dBm)
		@LO (dBm)				@LO (dBm)			@LO (dBm)					
		+14	+17	+20		+14	+17	+20	+14	+17	+20			+17
10.0	40.0	4.45	4.51	4.50	40.0	64.95	65.67	66.59	68.13	68.70	68.47	40.0	10.0	25.16
22.3	52.3	5.08	4.88	5.03	52.3	63.03	64.41	65.21	65.25	67.17	68.32	52.3	22.3	27.47
34.5	64.5	5.11	5.01	4.96	64.5	61.56	61.88	63.01	63.13	65.29	66.99	64.5	34.5	28.78
46.8	76.8	5.01	5.08	4.99	76.8	60.26	61.36	61.90	61.62	63.84	65.83	76.8	46.8	28.21
59.0	89.0	5.15	5.10	5.07	89.0	59.35	59.87	60.44	60.45	62.75	64.65	89.0	59.0	16.98
71.3	101.3	5.11	5.05	5.13	101.3	58.16	58.90	59.30	58.80	61.07	63.00	101.3	71.3	24.71
83.5	113.5	5.17	5.15	5.09	113.5	56.99	57.43	58.07	58.01	60.08	61.86	113.5	83.5	24.31
95.8	125.8	5.21	5.12	5.12	125.8	56.60	57.29	57.93	57.14	59.21	60.79	125.8	95.8	23.39
108.0	138.0	5.13	5.14	5.09	138.0	55.74	56.56	57.08	57.16	59.01	60.32	138.0	108.0	20.50
120.3	150.3	5.20	5.12	5.11	150.3	54.71	55.33	55.90	55.09	56.82	58.03	150.3	120.3	20.27
132.5	162.5	5.18	5.17	5.10	162.5	54.57	55.06	55.72	53.74	55.50	56.77	162.5	132.5	18.47
144.8	174.8	5.15	5.14	5.10	174.8	54.32	55.01	55.89	53.80	55.36	56.24	174.8	144.8	19.90
157.0	187.0	5.28	5.19	5.17	187.0	53.40	54.04	54.74	53.05	54.20	54.94	187.0	157.0	18.55
169.3	199.3	5.30	5.23	5.19	199.3	52.62	53.31	54.09	52.56	53.82	54.48	199.3	169.3	17.15
181.5	211.5	5.28	5.22	5.23	211.5	52.53	53.54	54.60	51.96	52.47	52.67	211.5	181.5	18.14
193.8	223.8	5.24	5.22	5.24	223.8	52.42	53.39	54.34	50.44	51.07	51.46	223.8	193.8	21.20
206.0	236.0	5.31	5.27	5.24	236.0	51.42	52.24	52.93	49.67	50.31	50.41	236.0	206.0	17.17
218.3	248.3	5.31	5.25	5.23	248.3	50.70	51.38	52.38	49.87	50.46	50.09	248.3	218.3	14.61
230.5	260.5	5.29	5.23	5.20	260.5	51.17	52.65	54.27	49.33	49.41	48.93	260.5	230.5	14.83
242.8	272.8	5.31	5.27	5.23	272.8	51.99	53.34	54.69	49.48	49.33	48.78	272.8	242.8	16.30
255.0	285.0	5.36	5.30	5.26	285.0	51.19	52.37	53.63	48.53	48.31	47.65	285.0	255.0	16.54
267.3	297.3	5.42	5.34	5.31	297.3	51.27	52.77	54.69	48.23	48.08	47.27	297.3	267.3	16.17
279.5	309.5	5.44	5.37	5.34	309.5	51.40	53.11	55.54	46.08	46.20	45.78	309.5	279.5	17.11
291.8	321.8	5.55	5.42	5.38	321.8	50.79	52.28	54.33	44.85	45.02	44.89	321.8	291.8	17.49
304.0	334.0	5.66	5.58	5.52	334.0	49.99	51.22	53.10	43.60	43.58	43.42	334.0	304.0	15.09
316.3	346.3	5.69	5.62	5.56	346.3	51.04	53.60	57.76	43.68	43.53	43.30	346.3	316.3	14.33
328.5	358.5	5.74	5.67	5.65	358.5	51.22	54.80	60.61	42.76	42.20	41.71	358.5	328.5	14.67
340.8	370.8	5.81	5.76	5.74	370.8	51.09	54.60	58.09	41.46	40.78	40.54	370.8	340.8	14.89
353.0	383.0	5.89	5.86	5.83	383.0	52.78	57.51	62.48	39.49	39.22	39.47	383.0	353.0	15.39
365.3	395.3	5.92	5.90	5.90	395.3	54.63	57.11	55.10	38.41	38.38	38.55	395.3	365.3	15.94
377.5	407.5	5.95	5.94	5.94	407.5	54.46	55.58	53.34	37.69	37.47	37.45	407.5	377.5	16.47
389.8	419.8	6.00	6.00	5.99	419.8	53.40	55.49	55.68	37.84	37.35	37.13	419.8	389.8	16.91
402.0	432.0	6.10	6.07	6.06	432.0	55.67	57.28	54.23	37.56	36.79	36.54	432.0	402.0	17.78
414.3	444.3	6.07	6.02	5.99	444.3	54.59	53.83	50.34	37.26	36.39	35.98	444.3	414.3	18.81
426.5	456.5	6.12	6.04	5.98	456.5	54.30	53.45	50.07	36.85	35.94	35.45	456.5	426.5	21.44
438.8	468.8	6.23	6.10	6.02	468.8	54.21	55.82	52.60	36.78	35.70	35.22	468.8	438.8	24.56
451.0	481.0	6.40	6.21	6.09	481.0	54.26	49.51	45.39	35.98	34.72	34.03	481.0	451.0	21.47
463.3	493.3	6.33	6.06	5.93	493.3	53.20	49.38	45.52	34.79	33.55	32.88	493.3	463.3	18.23
475.5	505.5	6.32	6.01	5.85	505.5	51.72	47.59	44.80	33.72	32.43	32.07	505.5	475.5	16.32
487.8	517.8	6.56	6.13	5.92	517.8	53.59	47.26	43.77	33.35	31.64	31.08	517.8	487.8	15.09
500.0	530.0	6.78	6.29	5.99	530.0	48.03	43.26	39.87	33.55	31.28	30.28	530.0	500.0	12.74



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Typical Performance Data

RF/LO (MHz)	RF VSWR (:1)			LO VSWR (:1)			IF (MHz)	IF VSWR (:1)		
	@LO (dBm)			@LO (dBm)				@LO (dBm)		
	+14	+17	+20	+14	+17	+20		+14	+17	+20
40.0	1.27	1.37	1.31	5.51	5.52	6.51	10.0	1.91	1.74	1.62
52.3	1.03	1.12	1.19	6.58	6.03	5.44	22.3	2.03	1.86	1.73
64.5	1.07	1.05	1.02	5.74	5.56	5.59	34.5	2.01	1.85	1.72
76.8	1.03	1.08	1.07	5.39	5.52	5.58	46.8	1.94	1.78	1.66
89.0	1.04	1.09	1.09	5.46	5.41	5.16	59.0	2.01	1.84	1.72
101.3	1.05	1.06	1.09	5.33	5.44	5.34	71.3	2.11	1.94	1.81
113.5	1.07	1.08	1.10	5.23	5.19	5.30	83.5	2.04	1.88	1.77
125.8	1.08	1.11	1.13	5.20	5.17	5.33	95.8	1.94	1.78	1.67
138.0	1.10	1.13	1.15	5.22	5.23	5.06	108.0	2.03	1.87	1.75
150.3	1.11	1.14	1.15	5.14	5.17	5.33	120.3	2.20	2.03	1.91
162.5	1.12	1.16	1.19	5.23	5.20	5.14	132.5	2.21	2.05	1.92
174.8	1.16	1.18	1.21	5.03	5.13	5.02	144.8	2.15	1.99	1.88
187.0	1.15	1.18	1.21	5.09	5.09	5.07	157.0	2.21	2.05	1.94
199.3	1.18	1.21	1.24	5.03	5.07	5.03	169.3	2.28	2.12	2.02
211.5	1.24	1.26	1.28	5.03	5.07	5.00	181.5	2.25	2.11	2.01
223.8	1.27	1.30	1.31	5.03	5.02	5.02	193.8	2.18	2.05	1.95
236.0	1.25	1.29	1.32	4.95	4.96	4.99	206.0	2.25	2.11	2.01
248.3	1.25	1.28	1.31	4.89	4.98	4.92	218.3	2.39	2.25	2.14
260.5	1.29	1.32	1.34	4.91	4.96	4.87	230.5	2.39	2.26	2.17
272.8	1.31	1.33	1.35	4.86	4.87	4.88	242.8	2.33	2.20	2.11
285.0	1.33	1.37	1.38	4.86	4.84	4.78	255.0	2.37	2.24	2.15
297.3	1.34	1.39	1.41	4.74	4.77	4.74	267.3	2.44	2.32	2.23
309.5	1.39	1.43	1.46	4.73	4.72	4.70	279.5	2.37	2.26	2.18
321.8	1.42	1.47	1.51	4.68	4.68	4.66	291.8	2.28	2.16	2.09
334.0	1.42	1.49	1.54	4.61	4.62	4.57	304.0	2.35	2.22	2.15
346.3	1.49	1.54	1.60	4.57	4.56	4.52	316.3	2.45	2.33	2.27
358.5	1.56	1.62	1.67	4.53	4.47	4.50	328.5	2.39	2.29	2.23
370.8	1.65	1.70	1.73	4.47	4.44	4.42	340.8	2.29	2.18	2.12
383.0	1.70	1.74	1.77	4.37	4.33	4.29	353.0	2.30	2.20	2.14
395.3	1.75	1.78	1.80	4.30	4.27	4.23	365.3	2.35	2.25	2.19
407.5	1.77	1.79	1.79	4.25	4.18	4.18	377.5	2.28	2.18	2.13
419.8	1.78	1.80	1.80	4.12	4.11	4.08	389.8	2.17	2.07	2.03
432.0	1.76	1.77	1.78	4.08	4.01	4.00	402.0	2.17	2.08	2.04
444.3	1.72	1.73	1.74	3.97	3.91	3.93	414.3	2.21	2.12	2.07
456.5	1.69	1.70	1.70	3.90	3.83	3.82	426.5	2.15	2.06	2.02
468.8	1.65	1.65	1.65	3.79	3.70	3.70	438.8	2.06	1.97	1.93
481.0	1.62	1.61	1.61	3.68	3.63	3.61	451.0	2.05	1.96	1.92
493.3	1.55	1.55	1.56	3.65	3.58	3.56	463.3	2.06	1.97	1.93
505.5	1.51	1.53	1.54	3.55	3.49	3.47	475.5	1.97	1.88	1.85
517.8	1.47	1.49	1.52	3.49	3.42	3.41	487.8	1.86	1.77	1.74
530.0	1.45	1.47	1.53	3.42	3.35	3.34	500.0	1.86	1.76	1.73

