Non-Catalog Model

Frequency Mixer LMX-156

Level 7 (LO Power +7 dBm)

Important Note

This is a non-catalog model and can be manufactured on specific request.
Pricing and delivery information can be supplied upon request.

Please click "Back", and then click "Contact Us" for Applications support.

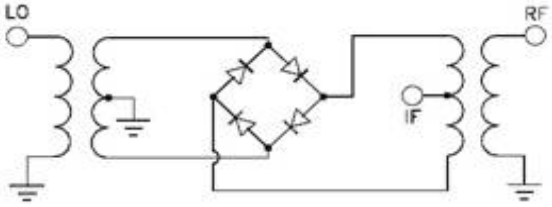
CASE STYLE : BB48

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C					
Parameter		**Min.**	**Typ.**	**Max.**	**Units**
Frequency	**LO** (fL to fU)	800		2500	MHz
	RF (fL to fU)	800		2500	MHz
	IF	0		1500	MHz
Conversion Loss			7.1	9.0	dB
LO-RF Isolation		25	35		dB
LO-IF Isolation		17	22		dB
1 dB Comp. Input Power			+1		dBm

MAXIMUM RATINGS	
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

PIN CONNECTIONS	
LO	8
RF	5
IF	4
GROUND	1, 2, 3, 6, 7

Electrical Schematics



Frequency Mixer LMX-156

Typical Performance Data

RF (MHz)	LO (MHz)	CONVERSION LOSS (dB)		
		@LO (dBm)		
		+7	+10	+13
800.0	830.0	9.06	8.59	8.32
847.2	877.2	9.02	8.51	8.23
894.4	924.4	8.90	8.20	7.77
941.7	911.7	8.00	7.28	6.78
1000.0	970.0	7.42	6.67	6.28
1083.3	1053.3	6.96	6.33	6.00
1130.6	1100.6	7.11	6.50	6.16
1225.0	1196.0	7.18	6.67	6.39
1366.7	1336.7	7.52	7.08	6.77
1413.9	1383.9	7.65	7.23	6.98
1500.0	1470.0	7.71	7.36	7.16
1555.6	1525.6	7.72	7.38	7.18
1650.0	1620.0	7.80	7.44	7.23
1791.7	1761.7	8.07	7.60	7.39
1933.3	1903.3	8.89	7.99	7.63
2000.0	1970.0	8.81	7.88	7.50
2122.2	2092.2	8.70	7.72	7.32
2263.9	2233.9	8.00	7.19	6.80
2405.6	2375.6	7.92	7.11	6.73
2500.0	2470.0	8.31	7.55	7.23

LO (MHz)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)		
	@LO (dBm)			@LO (dBm)		
	+7	+10	+13	+7	+10	+13
800.0	42.0	42.2	42.2	31.7	30.7	30.0
847.2	41.3	42.1	42.8	31.1	30.1	29.3
894.4	39.1	40.2	40.9	30.5	29.6	28.7
941.7	35.9	36.8	37.1	29.9	29.1	28.2
1000.0	33.4	34.9	35.8	29.2	28.5	27.6
1083.3	31.5	33.5	34.6	28.1	27.6	26.9
1130.6	30.6	32.7	34.4	27.4	27.0	26.5
1225.0	31.4	32.9	34.4	25.9	25.6	25.2
1366.7	32.3	34.2	35.5	26.5	25.7	24.8
1413.9	32.9	34.7	36.1	26.1	25.1	24.0
1500.0	33.9	36.1	37.7	25.5	24.6	23.5
1555.6	32.3	34.2	35.6	25.6	24.7	23.5
1650.0	33.1	34.0	34.3	25.3	24.7	23.8
1791.7	34.0	33.9	33.8	25.4	25.6	25.4
1933.3	33.8	33.6	33.4	27.0	27.9	28.2
2000.0	33.4	33.3	33.4	28.0	29.4	29.9
2122.2	32.5	32.9	33.5	29.9	31.7	32.4
2263.9	31.2	31.8	32.6	32.2	33.6	34.1
2405.6	30.1	29.8	29.3	33.0	33.4	33.0
2500.0	29.0	28.2	27.5	32.9	32.2	31.5

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Typical Performance Data

RF/LO (MHz)	RF VSWR (:1) @LO (dBm)			LO VSWR (:1) @LO (dBm)			IF (MHz)	IF VSWR (:1) @LO (dBm)			LO/RF (MHz) @LO (dBm)	max. DC output (mV)	DC Offset (mV)
	+7	+10	+13	+7	+10	+13		+7	+10	+13	+10		
800.0	2.71	2.63	2.58	1.95	2.38	3.04	5.0	2.11	1.85	1.68	800.0	-180.0	-1.05
847.2	2.18	2.12	2.10	1.94	2.35	2.98	42.7	2.11	1.86	1.69	847.2	-193.4	-1.43
894.4	1.73	1.70	1.70	1.95	2.33	2.95	80.1	2.12	1.87	1.70	894.4	-197.6	-2.64
941.7	1.37	1.36	1.39	2.00	2.38	2.98	117.7	2.12	1.88	1.72	941.7	-199.2	-1.50
1000.0	1.03	1.11	1.18	2.01	2.36	2.93	200.0	2.12	1.92	1.80	1000.0	-194.0	-0.82
1083.3	1.41	1.42	1.43	2.02	2.33	2.88	275.5	2.07	1.95	1.88	1083.3	-189.0	1.93
1130.6	1.68	2.68	1.67	2.06	2.32	2.84	350.6	1.98	1.94	1.93	1130.6	-185.4	3.01
1225.0	2.19	2.15	2.12	2.12	2.37	2.86	463.3	1.80	1.85	1.92	1225.0	-181.6	5.63
1366.7	2.77	2.67	2.61	2.25	2.39	2.81	538.4	1.69	1.78	1.89	1366.7	-170.1	4.99
1413.9	2.90	2.80	2.73	2.26	2.36	2.73	621.0	1.61	1.73	1.87	1413.9	-160.5	4.38
1500.0	3.04	2.92	2.85	2.33	2.37	2.73	733.7	1.55	1.68	1.85	1500.0	-160.5	3.64
1555.6	3.09	2.96	2.89	2.38	2.37	2.67	808.8	1.53	1.69	1.86	1555.6	-149.0	5.78
1650.0	3.08	2.94	2.86	2.53	2.40	2.65	884.0	1.51	1.69	1.87	1650.0	-148.1	7.71
1791.7	2.93	2.80	2.71	2.69	2.46	2.63	1000.0	1.43	1.63	1.84	1791.7	-132.5	8.51
1933.3	2.69	2.58	2.48	2.88	2.51	2.57	1079.3	1.39	1.60	1.81	1933.3	-106.5	7.51
2000.0	2.57	2.46	2.38	2.85	2.51	2.57	1154.4	1.33	1.51	1.69	2000.0	-105.7	7.90
2122.2	2.34	2.24	2.16	2.98	2.53	2.51	1229.5	1.25	1.43	1.59	2122.2	-85.6	8.56
2263.9	2.11	2.01	1.93	3.01	2.52	2.44	1349.7	1.25	1.42	1.58	2263.9	-66.3	9.32
2405.6	1.97	1.86	1.79	3.04	2.49	2.34	1424.9	1.15	1.34	1.50	2405.6	-39.5	10.40
2500.0	1.92	1.82	1.75	3.09	2.50	2.31	1500.0	1.29	1.46	1.59	2500.0	-18.7	12.36

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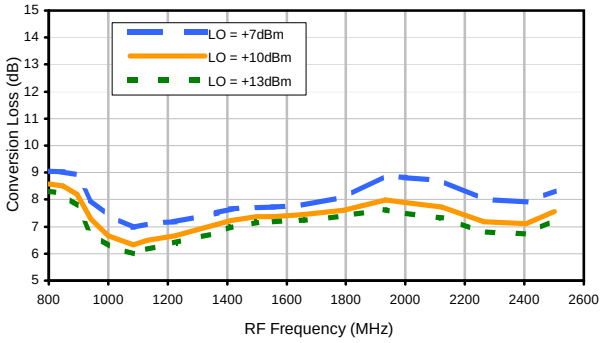
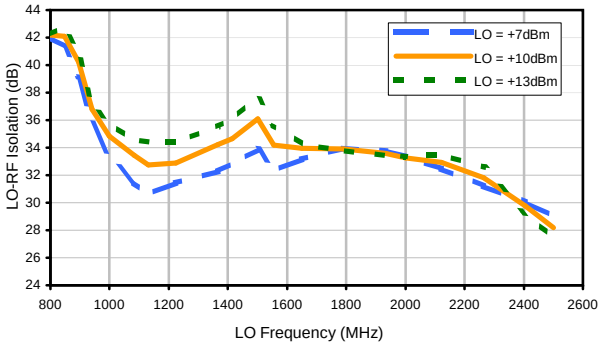
Typical Performance Curves

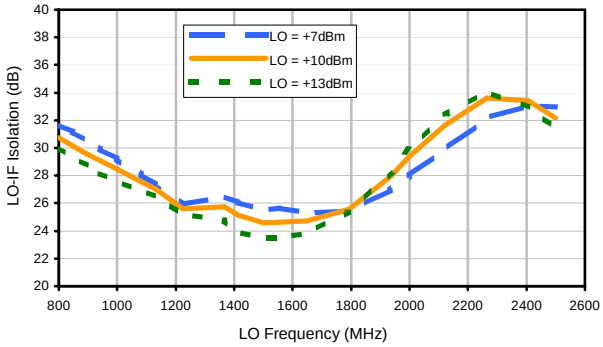
Conversion Loss



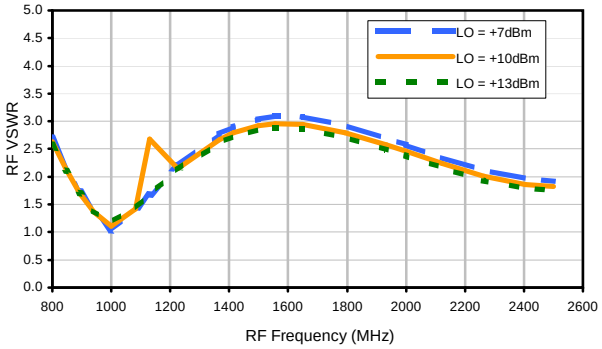
LO-RF Isolation



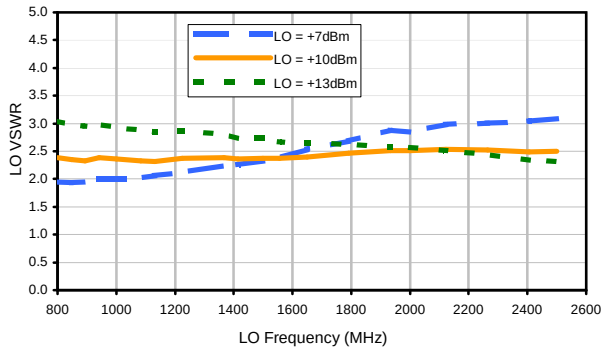
LO-IF Isolation



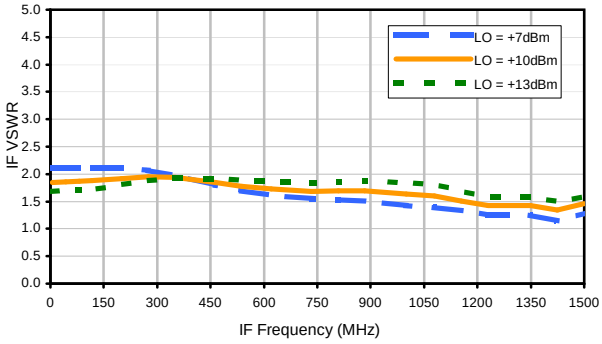
RF VSWR



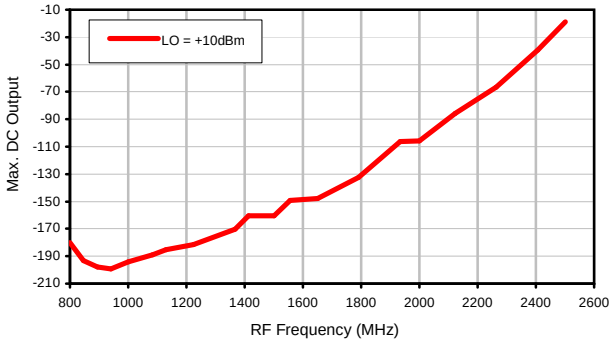
LO VSWR



IF VSWR



Max. DC Output



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