

Frequency Mixers

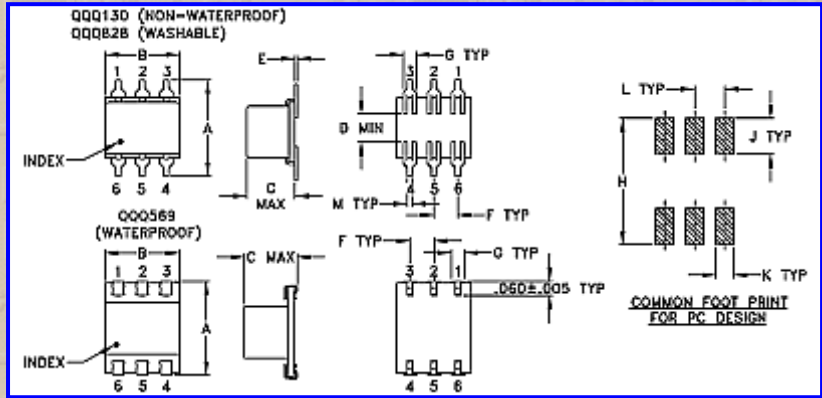
 [print this page](#)

LO Power Level 10 dBm

Pin Configuration

Port	LO	RF	IF	Gnd	Ext.	Case Gnd	Not Used
w	1	4	5	2,3,6	-	-	-

Outline Drawing



Case Style - QQQ569 (inch,mm) weight: 0.5 grams.

A	B	C	D	E	F	G	H	J
.390	.31	.225			.100	.045	.420	.120
9.906	7.874	5.715			2.540	1.143	10.668	3.048
K	L	M	N	P	Q	R	S	T
.060	.100							
1.524	2.540							

Tolerance: .x ± .1 .xx ± .03 .xxx ± .015 inch.

Material and Finish:

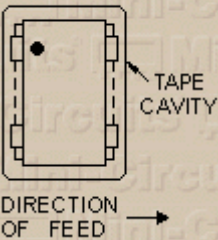
Case material: ceramic. Lead finish: tin-lead plate or tin plate

Special Tolerances:

Lead width ±.005 inch.

Packaging:

UNIT ORIENTATION



Packaging information:

Tape Width(mm): 32

Reel Size(inches): 13

Device Cavity Pitch(mm): 16

Devices Per Reel: 500

Notes:

- For Surface Mount Environmental Specifications, please click [here](#).
- General Quality Control Procedures and Environmental Specifications are given in [Mini- Circuits Guarantees Quality](#).
Hi-Rel, MIL description are given in [Hi-Rel and MIL](#)
- Prices and Specifications subjects to change without notice.

LRMS-1LHJ



Electrical Specifications

LRMS-1LHJ LO Power Level 10 dBm

Frequency MHz		Max. Conversion Loss dB		Min. LO-RF Isolation dB			Min. LO-IF Isolation dB		
LO/RF	IF	Mid-Band	Total Range	L	M	U	L	M	U
2.00-500	DC-500	7.0	8.0	45	25	20	40	25	17

L=low range(f_L to $10f_L$) M=mid range($10f_L$ to $f_U/2$) U=upper range($f_U/2$ to f_U)

Typical Performance Data

LRMS-1LHJ		Conversion Loss (dB)			ISO	Isolation L-R (dB)			Isolation L-I (dB)		
RF MHz	LO MHz	LO +7 dBm	LO +10 dBm	LO +13 dBm	LO (MHz)	LO +7 dBm	LO +10 dBm	LO +13 dBm	LO +7 dBm	LO +10 dBm	LO +13 dBm
2.000	32.000	7.08	6.73	6.55	2.000	65.89	68.96	71.56	55.04	58.87	62.73
5.000	35.000	6.14	5.87	5.71	5.000	65.11	67.37	69.67	54.46	56.74	57.76
10.000	40.000	6.47	6.17	5.99	10.000	63.38	65.16	66.06	52.78	52.79	52.34
20.000	50.000	6.52	6.15	5.98	20.000	59.44	60.74	61.11	48.83	47.32	46.43
32.182	62.182	6.43	6.06	5.90	32.182	55.84	57.04	57.56	45.02	43.21	42.62
50.000	80.000	6.39	6.05	5.90	50.000	54.54	48.82	48.60	31.02	29.76	29.52
77.454	47.454	6.41	6.06	5.89	77.454	53.04	55.97	56.08	39.92	37.96	36.59
100.000	70.000	6.22	5.90	5.76	100.000	53.94	59.73	58.30	38.89	36.65	35.45
122.727	92.727	6.19	5.91	5.80	122.727	60.06	63.14	58.62	38.06	35.55	34.01
152.909	122.909	6.16	5.92	5.84	152.909	60.00	56.38	54.16	36.71	34.01	32.14
198.182	168.182	6.19	5.94	5.85	198.182	50.27	48.84	47.52	34.51	32.04	30.39
228.364	198.364	6.23	5.96	5.86	228.364	46.53	45.44	44.39	32.73	30.49	28.84
250.000	220.000	6.31	6.03	5.91	250.000	44.76	43.77	42.72	31.59	29.78	28.17
273.636	243.636	6.36	6.06	5.91	273.636	42.98	42.07	41.03	30.44	28.92	27.32
303.818	273.818	6.48	6.12	5.95	303.818	40.23	39.63	38.75	29.00	27.42	25.96
334.000	304.000	6.45	6.12	5.94	334.000	38.50	37.56	36.43	27.44	26.38	24.74
379.273	349.273	6.42	6.09	5.89	379.273	36.16	34.91	33.95	25.55	25.00	23.68
409.455	379.455	6.29	5.98	5.81	409.455	34.74	33.53	32.01	24.30	24.14	22.53
454.727	424.727	6.38	6.04	5.92	454.727	32.96	31.70	30.24	22.91	22.72	21.21
500.000	470.000	6.49	6.19	6.05	500.000	31.47	30.03	28.73	21.67	21.67	20.55

RF/LO	VSWR RF port			VSWR LO port			IF	VSWR IF port			Ø detection		
FREQ. (MHz)	LO +7 dBm	LO +10 dBm	LO +13 dBm	LO +7 dBm	LO +10 dBm	LO +13 dBm	FREQ. (MHz)	LO +7 dBm	LO +10 dBm	LO +13 dBm	FREQ. MHz	max.DC output mV	DC offset mV
5.000	1.15	1.16	1.18	1.61	2.42	3.53	5.000	1.31	1.18	1.08	2.00	336.50	0.37
10.000	1.09	1.08	1.11	1.58	2.33	3.49	10.000	1.31	1.18	1.08	5.00	341.20	0.37
20.000	1.06	1.03	1.08	1.67	2.43	3.73	20.000	1.31	1.18	1.08	17.09	341.40	0.36
34.118	1.06	1.02	1.07	1.68	2.47	3.60	34.118	1.32	1.18	1.08	20.00	340.50	0.37
50.000	1.07	1.03	1.08	1.64	2.47	3.43	50.000	1.33	1.19	1.09	47.27	335.30	0.41
77.794	1.08	1.05	1.09	1.61	2.35	3.39	77.794	1.33	1.20	1.10	62.36	335.60	0.30
100.000	1.11	1.08	1.10	1.62	2.35	3.37	100.000	1.34	1.20	1.11	92.55	335.90	0.08
121.471	1.13	1.10	1.12	1.65	2.35	3.43	121.471	1.34	1.21	1.12	107.64	338.80	0.03
150.588	1.15	1.13	1.15	1.66	2.35	3.43	150.588	1.35	1.23	1.14	137.82	340.00	0.14
179.706	1.19	1.16	1.17	1.66	2.30	3.35	179.706	1.37	1.24	1.16	168.00	340.40	0.75
208.824	1.22	1.20	1.20	1.67	2.31	3.29	208.824	1.38	1.26	1.18	198.18	338.00	1.47
250.000	1.26	1.24	1.24	1.73	2.34	3.28	250.000	1.38	1.24	1.16	243.46	339.90	3.08
267.059	1.28	1.26	1.26	1.70	2.32	3.23	267.059	1.41	1.28	1.20	258.55	343.50	3.66
296.177	1.32	1.30	1.30	1.75	2.33	3.21	296.177	1.44	1.31	1.23	288.73	346.70	4.56
339.853	1.37	1.35	1.35	1.82	2.37	3.21	339.853	1.46	1.34	1.25	334.00	352.70	7.63
368.971	1.41	1.39	1.39	1.83	2.34	3.12	368.971	1.48	1.36	1.28	364.18	351.00	10.03
398.088	1.45	1.43	1.43	1.86	2.39	3.17	398.088	1.50	1.37	1.29	394.36	339.70	11.54

441.765	1.51	1.49	1.49	1.89	2.36	3.10	441.765	1.52	1.40	1.32	439.64	321.60	14.70
470.882	1.56	1.54	1.53	1.92	2.39	3.08	470.882	1.53	1.41	1.33	469.82	314.50	16.19
500.000	1.60	1.58	1.57	1.98	2.46	3.17	500.000	1.53	1.42	1.34	500.00	312.10	17.82

Click Above for Actual Performance Data.



INTERNET <http://www.minicircuits.com>

P.O.Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

Distribution Centers NORTH AMERICA 800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE • 44-1252-832600 • Fax 44-1252-837010

ISO 9001 CERTIFIED

[Back](#)

i2 Technologies US, Inc.

HTML Pages converted to PDF Document

This document contain component information from the manufacturer's website which are not available in a revision controlled document from the manufacturer. To facilitate the addition of these parts into the Electronics Database, we are converting the HTML pages related to that part, from the manufacturer's website into Adobe PDF format. The contents of this document is based on the information provided on the manufacturer's website, therefore the information may have been changed by the manufacturer since this was created.

