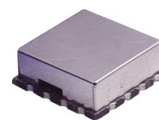


Frequency Mixer

LAVI-2VH+

Level 23 (LO Power +23dBm) 2 to 1100 MHz



CASE STYLE: CK605
 PRICE: \$ 24.95 ea. QTY (1-9)
 \$ 17.95 ea. QTY. (100)

Maximum Ratings

Operating Temperature	-45°C to 85°C
Storage Temperature	-55°C to 100°C
LO Power	+25 dBm
RF Power	+24 dBm

Pin Connections

LO	10
RF	2
IF	14
GROUND	1,3,4,5,6,7,8,9,11,12,13,15,16

Features

- RoHS compliant
- high IP3, 34 dBm typ.
- wideband, 2 to 1100 MHz
- excellent L-R isolation, 48 dB typ. and L-I isolation, 47 dB typ.
- high 1 dB compression, 23 dBm typ.
- shielded metal cover
- U.S. patent 6,807,407

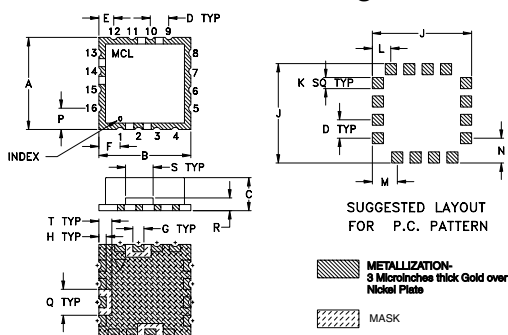
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +suffix has been added in order to identify RoHS Compliance. There has been no change to the model's material, form, fit, or function. See our web site for RoHS Compliance methodologies and qualifications.

Applications

- cellular base stations
- mobile radio
- defense communications
- CATV
- VHF/UHF radios

Outline Drawing

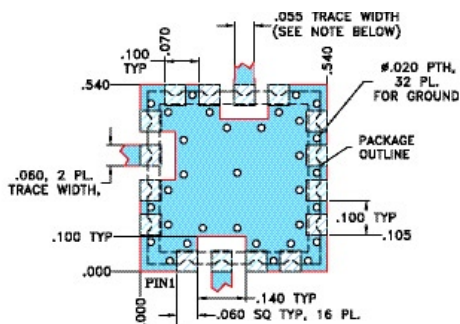


Outline Dimensions (inch)

A	B	C	D	E	F	G	H	J
.500	.500	.180	.100	.080	.115	.060	.040	.540
12.70	12.70	4.57	2.54	2.03	2.92	1.52	1.02	13.72

K	L	M	N	P	Q	R	S	T	wt.
.060	.100	.135	.135	.115	.140	.070	.150	.070	grams
1.52	1.50	3.43	3.43	2.92	3.56	1.78	3.81	1.78	1.0

Demo Board MCL P/N: TB-10 Suggested PCB Layout (PL-012)



NOTE: TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS 0.030" ± 0.002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.

- DENOTES PCB COPPER LAYOUT
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Electrical Specifications (T_{AMB}=25°C)

FREQUENCY (MHz)			CONVERSION LOSS (dB)			RF in at 1dB Compr (dBm)	IP3* (dBm)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)	
RF	LO	IF	Typ.	σ	Max.	Typ.	Typ.	Min.	Typ.	Min.	
2-1100	2-1100	2-1000	7.5	0.12	9.5	+23	34	48	37	47	36

* Specified at RF=1000 MHz

Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)		IP3 (dBm)	Isolation (dB)		VSWR LO (:1)	RF Freq. (MHz)	VSWR RF (:1)		IF Freq. (MHz)	VSWR IF (:1)
	LO	LO +23dBm		L-R	L-I			LO	LO +23dBm		
1000.00	2.00	8.84	36.36	80.15	79.56	2.52	1.00	1.42	1.00	1.28	
1000.00	10.10	8.50	36.21	64.24	64.70	4.00	2.50	1.40	2.50	1.26	
1000.00	20.10	8.43	36.94	57.95	58.04	3.91	10.00	1.38	7.00	1.24	
1000.00	50.10	8.48	34.40	52.41	52.57	3.33	50.00	1.40	10.00	1.24	
1000.00	100.10	8.42	34.03	55.18	55.01	4.10	100.00	1.47	50.00	1.27	
1000.00	200.10	8.38	34.70	55.14	53.56	3.53	200.00	1.49	100.00	1.36	
1000.00	300.10	8.39	33.35	52.19	49.86	2.73	300.00	1.46	200.00	1.60	
1000.00	400.10	8.38	34.28	49.15	47.77	2.63	400.00	1.41	300.00	1.85	
1000.00	500.10	8.42	36.02	47.68	46.13	3.09	500.00	1.35	400.00	2.05	
1000.00	600.10	8.30	35.65	44.95	43.33	3.48	600.00	1.32	500.00	2.09	
1000.00	700.10	8.18	32.20	41.90	41.31	3.25	700.00	1.26	600.00	2.14	
1000.00	800.10	8.03	32.86	45.08	44.17	2.84	800.00	1.24	700.00	2.02	
1000.00	900.10	8.11	35.35	51.42	49.99	2.79	900.00	1.15	800.00	1.91	
1000.00	1010.10	7.99	34.24	50.17	49.93	2.74	1000.00	1.09	900.00	1.70	
1000.00	1100.10	8.16	31.77	47.04	46.73	2.55	1100.00	1.06	990.00	1.65	

electrical schematic

