

Frequency Mixer

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

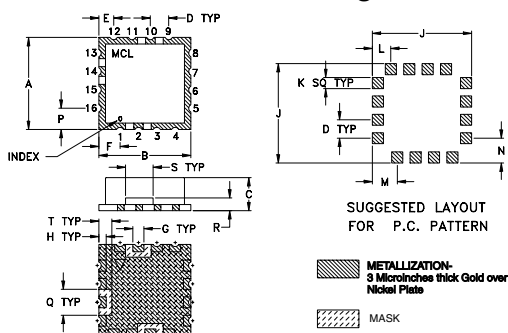
Maximum Ratings

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

Outline Drawing

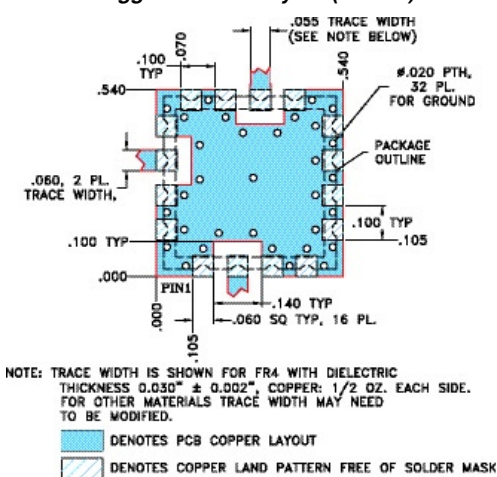


Outline Dimensions (inch)

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)



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

Applications

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



CASE STYLE: CK605

PRICE: \$ 24.95 ea. QTY. (1-9)

\$ 17.95 ea. QTY. (100)

+ 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.

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.	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 L-R (dB)	Isolation L-I (dB)	VSWR LO (:1)	RF Freq. (MHz)	VSWR RF (:1)	IF Freq. (MHz)	VSWR IF (:1)
RF	LO	LO +23dBm	LO +23dBm	LO +23dBm	LO +23dBm	LO +23dBm		LO +23dBm		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

