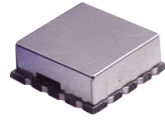


Frequency Mixer

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

LAVI-2VH+



CASE STYLE: CK605

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

\$ 17.95 ea. QTY. (100)

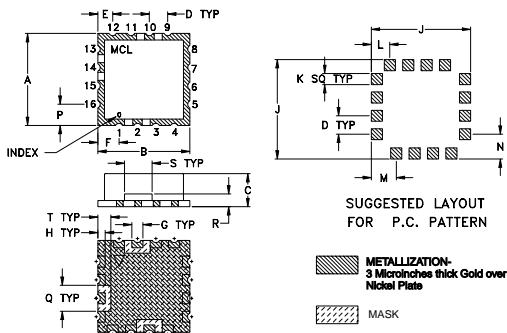
Maximum Ratings

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

Outline Drawing

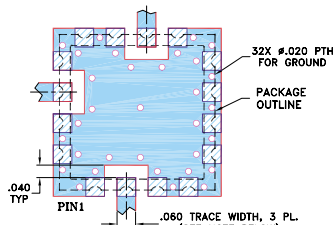


Outline Dimensions (inch)

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

L	M	N	P	Q	R	S	T	wt.
.100	.135	.135	.115	.140	.070	.150	.070	grams
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)



- NOTES: 1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .030" ± .002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
3. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
4. DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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
- protected by US Patent 6,807,407

Applications

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

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 (1:1)	VSWR RF (1:1)	IF Freq. (MHz)	VSWR IF (1:1)
RF	LO								
		+23dBm	+23dBm	+23dBm	+23dBm	+23dBm	+23dBm		
2.10	32.10	6.21	33.04	54.85	54.80	4.05	1.23	2.00	1.23
5.10	35.10	6.21	32.18	54.39	54.54	4.11	1.22	5.00	1.22
12.10	42.10	6.23	30.70	53.71	53.75	4.13	1.23	12.00	1.23
52.10	82.10	6.18	29.56	55.03	54.87	2.52	1.27	52.00	1.25
100.10	130.10	6.38	29.36	57.25	55.04	4.01	1.36	100.00	1.31
220.10	250.10	6.62	31.29	56.89	52.84	2.99	1.50	220.00	1.46
300.10	330.10	6.60	30.65	50.40	49.21	3.43	1.53	300.00	1.58
420.10	450.10	6.94	31.86	47.19	48.38	3.32	1.53	420.00	1.80
500.10	530.10	6.75	31.63	43.95	45.44	3.93	1.49	500.00	1.90
620.10	650.10	6.97	31.02	42.14	42.90	3.45	1.46	620.00	2.06
740.10	770.10	7.36	30.87	39.64	41.69	5.01	1.41	740.00	2.07
820.10	850.10	7.48	32.54	43.30	49.90	3.85	1.24	820.00	1.74
900.10	930.10	7.40	33.19	47.94	58.49	2.87	1.13	900.00	1.60
1010.10	1040.10	7.52	33.24	50.72	63.09	3.66	1.10	975.00	1.59
1070.10	1100.10	7.70	32.54	54.52	52.16	2.19	1.09	1000.00	1.55

Electrical Schematic

