

High IP3

Frequency Mixer

LAVI-711H+

Level 17 (LO Power +17 dBm) 220 to 710 MHz

Maximum Ratings

Operating Temperature	-45°C to 85°C
Storage Temperature	-55°C to 100°C
LO Power	+23 dBm
RF Power	+21 dBm

Permanent damage may occur if any of these limits are exceeded.

Pin Connections

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

Features

- very high IP3, 30 dBm typ.
- low conversion loss, 7.3 dB typ.
- excellent L-R isolation, 50 dB typ. and L-I isolation, 40 dB typ.
- high 1 dB compression, 20 dBm typ.
- shielded metal cover
- aqueous washable
- protected by US Patent 6,807,407

Applications

- cellular/PCS base stations
- ISM applications
- defense communications



CASE STYLE: CK605

PRICE: \$22.95 ea. QTY. (1-9)
\$15.95 ea. QTY. (100)

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

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

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

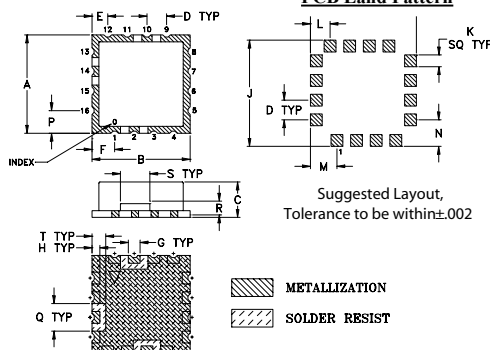
FREQUENCY (MHz)			CONVERSION LOSS (dB)			RF in at 1dB Compr (dBm)	IP3 (dBm)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)	
RF	LO	IF	Typ.	σ	Max.	Typ.	Typ.	Typ.	Min.	Typ.	Min.
220-710	250-740	10-500	7.3	0.25	9.0	+20	30	50	40	40	29

Typical Performance Data

Frequency (MHz)		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)	IP3 (dBm)	IF Freq. (MHz)	VSWR IF (:1)
RF	LO	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm		LO +17dBm
220.10	250.10	7.37	58.20	42.61	1.24	3.44	27.05	10.10	1.07
245.10	275.10	7.33	58.37	41.84	1.27	3.44	27.24	50.10	1.10
270.10	300.10	7.38	58.15	41.44	1.27	3.40	27.47	100.10	1.18
295.10	325.10	7.39	59.45	40.60	1.28	3.35	27.83	150.10	1.30
320.10	350.10	7.29	57.31	40.07	1.30	3.31	28.59	200.10	1.37
345.10	375.10	7.31	56.89	39.15	1.30	3.22	28.92	250.10	1.49
370.10	400.10	7.33	56.33	38.49	1.31	3.12	28.72	300.10	1.55
395.10	425.10	7.26	55.25	37.32	1.33	2.96	29.29	350.10	1.68
420.10	450.10	7.27	54.20	36.46	1.35	2.78	30.08	360.10	1.66
445.10	475.10	7.28	54.23	35.93	1.34	2.57	30.08	370.10	1.71
470.10	500.10	7.31	53.26	35.82	1.34	2.34	30.88	380.10	1.72
495.10	525.10	7.34	50.69	34.89	1.36	2.11	31.80	390.10	1.69
520.10	550.10	7.57	48.58	32.99	1.35	1.92	32.30	400.10	1.74
545.10	575.10	7.78	48.42	31.25	1.32	1.78	30.64	410.10	1.81
570.10	600.10	7.55	47.58	31.44	1.30	1.75	30.23	420.10	1.79
595.10	625.10	7.40	45.58	32.28	1.31	1.81	30.72	430.10	1.81
620.10	650.10	7.43	43.91	33.02	1.32	1.92	30.51	440.10	1.86
645.10	675.10	7.47	42.94	33.63	1.33	2.06	30.05	450.10	1.86
670.10	700.10	7.49	42.71	34.42	1.34	2.24	29.07	460.10	1.83
710.10	740.10	7.55	43.16	35.55	1.37	2.52	27.02	500.10	1.94

Outline Drawing

PCB Land Pattern



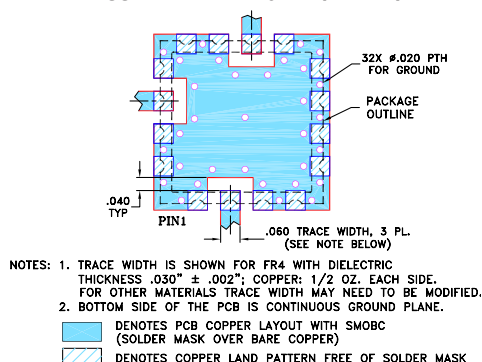
Suggested Layout, Tolerance to be within ±.002

Outline Dimensions (inch)

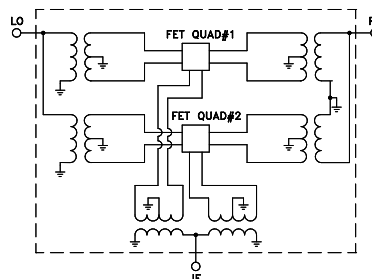
A	B	C	D	E	F	G	H	J	K
.500	.500	.180	.100	.080	.115	.060	.040	.540	.060
12.7	12.7	4.572	2.54	2.032	2.921	1.524	1.016	13.72	1.524

L	M	N	P	Q	R	S	T	wt.
.100	.135	.135	.115	.140	.070	.150	.070	grams
2.54	3.429	3.429	2.921	3.556	1.778	3.81	1.778	1.0

Demo Board MCL P/N: TB-433+ Suggested PCB Layout (PL-012)



Electrical Schematic



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IF/RF MICROWAVE COMPONENTS

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