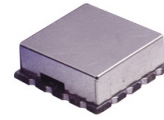


Surface Mount

Frequency Mixer

LAVI-9VH+

Level 19 (LO Power +19dBm) 820 to 870 MHz



CASE STYLE: CK605
 PRICE: \$ 15.95 ea. QTY (1-9)
 \$ 13.95 ea. QTY. (100)

Maximum Ratings

Operating Temperature	-45°C to 85°C
Storage Temperature	-55°C to 100°C
LO Power	+22 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
- very high IP3, 36 dBm typ.
- 1 dB compression, +23 dBm
- excellent L-R isolation, 46 dB typ. and L-I isolation, 46 dB typ.
- good VSWR all ports
- shielded metal cover
- dual double balanced FET mixer
- U.S. patent 6,807,407

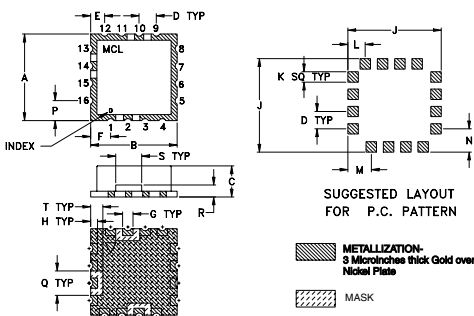
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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 station

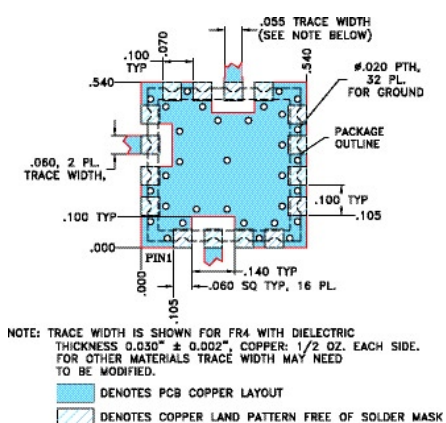
Outline Drawing



Outline Dimensions (inch/mm)

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)



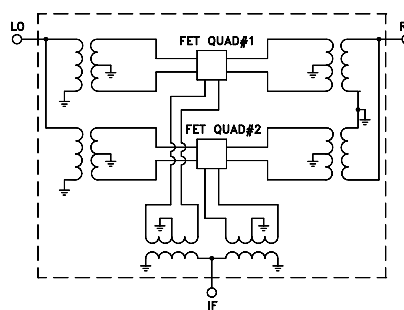
Electrical Specifications (T_{AMB}=25°C)

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.
820-870	990-1040	120-220	7.2	0.12	8.5	+23	36	46	40	46	37

Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)	IP3 (dBm)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR LO	RF VSWR (MHz)	VSWR RF (MHz)	IF VSWR (MHz)	VSWR IF	
RF	LO	LO	LO	LO	LO	LO	LO	LO	LO	
		+19dBm	+19dBm	+19dBm	+19dBm	+19dBm	+19dBm	+19dBm	+19dBm	
820.13	990.13	7.66	36.27	45.15	48.68	1.10	820.13	1.65	120.00	1.35
823.26	993.26	7.64	35.76	45.27	48.66	1.06	823.26	1.61	130.00	1.32
826.38	996.38	7.61	36.91	45.40	48.66	1.06	826.38	1.60	150.00	1.33
829.51	999.51	7.58	36.19	45.53	48.70	1.09	829.51	1.61	155.00	1.33
832.63	1002.63	7.56	36.72	45.67	48.73	1.14	832.63	1.62	158.96	1.33
835.76	1005.76	7.54	36.76	45.86	48.67	1.19	835.76	1.63	161.00	1.34
838.88	1008.88	7.51	36.71	46.02	48.69	1.25	838.88	1.64	166.00	1.34
842.01	1012.01	7.49	36.98	46.21	48.73	1.31	842.01	1.65	169.00	1.35
845.13	1015.13	7.46	36.42	46.45	48.69	1.37	845.13	1.67	172.00	1.35
848.26	1018.26	7.43	37.07	46.65	48.72	1.44	848.26	1.68	175.00	1.36
851.38	1021.38	7.40	37.25	46.84	48.66	1.50	851.38	1.70	178.96	1.37
854.51	1024.51	7.38	37.26	47.09	48.69	1.57	854.51	1.72	181.00	1.37
857.63	1027.63	7.37	37.05	47.26	48.65	1.64	857.63	1.75	190.00	1.40
860.76	1030.76	7.35	36.85	47.42	48.51	1.72	860.76	1.77	200.00	1.43
863.88	1033.88	7.34	37.19	47.70	48.49	1.79	863.88	1.87	210.00	1.46
867.01	1037.01	7.33	37.23	47.90	48.44	1.86	867.01	1.96	215.00	1.50
870.13	1040.13	7.31	36.75	48.17	48.42	1.93	870.13	2.04	220.00	1.54

electrical schematic



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