

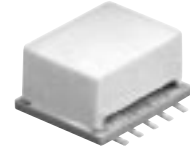
Surface Mount Frequency Mixer

Level 10 (LO Power +10 dBm) 1000 to 5000 MHz

NEW!

MCA-50LH

(patent pending)



CASE STYLE: DM842
PRICE: \$7.95 Qty. (10-49)

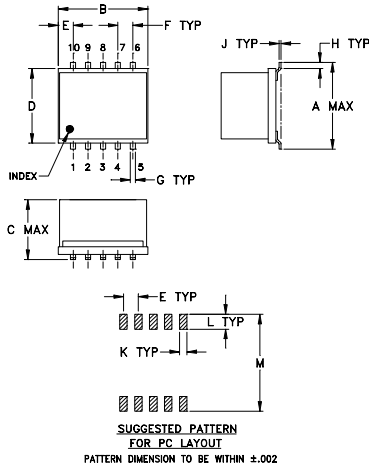
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

Pin Configuration

LO	10
RF	5
IF	3
GROUND	1,2,4,6,7,8,9

Outline Drawing



Outline Dimensions (inch mm)

A	B	C	D	E	F	G	H	J
.300	.30	.200	.250	.050	.050	.017	.020	.006
7.62	7.62	5.08	6.35	1.27	1.27	0.43	0.51	0.15
K	L	M	wt.					
.025	.050	.325	grams					
0.64	1.27	8.26	.50					

Features

- wide bandwidth, 1000-5000 MHz
- good L-R isolation, 25 dB typ.; L-I isolation, 30 dB typ.
- small size 0.25"x0.3"x0.2"

Applications

- PCN
- satellite
- line of sight links



Electrical Specifications

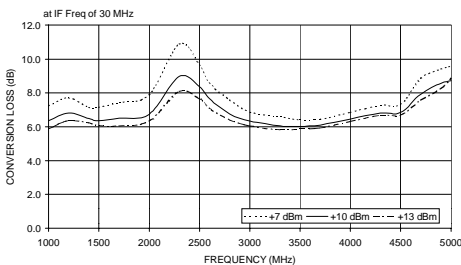
FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3@ center band Typ. (dBm)	E FACTOR
		Typ.	Min.	Typ.	Min.		
1000-5000	7.3	20	32	17	0.7		
1000-1400	6.8	25	32	17	0.7		
1400-2000	6.6	25	32	18	0.8		
2000-2600	7.8	25	30	18	0.8		
2600-4500	7.8	35	25	15	0.5		
4500-5000	8.0	35	25	16	0.6		

* see individual band specs.
1dB Compr.: +6 dBm typ.
E = [IP3(dBm)-LO Power(dBm)]/10

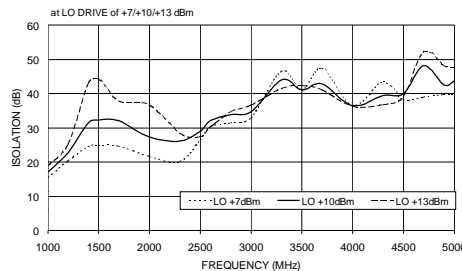
Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR LO port (-1)	VSWR RF port (-1)
1000.00	6.35	17.12	31.71	1.26	2.47
1200.00	6.82	22.83	32.80	1.45	3.38
1400.00	6.47	31.46	32.61	1.68	3.65
1500.00	6.35	32.37	32.38	1.70	3.30
1700.00	6.51	32.07	31.97	1.77	2.65
2000.00	6.74	27.30	30.10	2.03	2.33
2300.00	8.98	26.10	27.64	2.28	2.34
2500.00	8.37	29.05	28.95	2.06	2.15
2600.00	7.65	32.15	29.98	1.94	2.14
2800.00	6.77	33.81	29.39	1.99	1.77
3000.00	6.32	34.73	28.07	2.25	1.34
3300.00	6.05	44.02	29.07	2.25	1.18
3500.00	6.03	41.14	30.94	2.02	1.08
3700.00	6.09	42.90	34.87	1.90	1.32
4000.00	6.45	36.49	38.88	2.14	1.27
4300.00	6.82	39.53	39.42	2.27	1.51
4500.00	6.83	39.98	34.92	1.99	1.79
4700.00	7.93	48.22	33.29	1.76	2.77
4900.00	8.56	42.47	44.46	2.01	3.47
5000.00	8.71	43.61	44.80	2.00	3.46

MCA-50LH CONVERSION LOSS



MCA-50LH ISOLATION L-R



MCA-50LH VSWR

