

Frequency Mixers

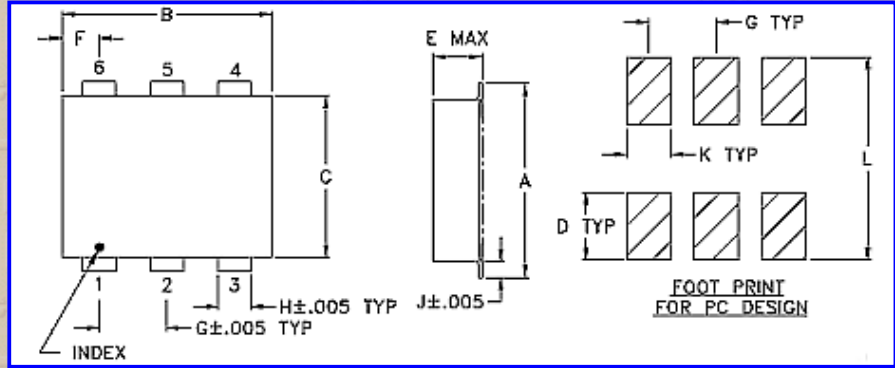
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LO Power Level 17 dBm

Pin Configuration

Port	LO	RF	IF	Gnd Ext.	Case Gnd	Not Used
jv	6	4	3	1,2,5	-	-

Outline Drawing



Case Style - CD542 (inch,mm) weight: 0.2 grams.

A	B	C	D	E	F	G	H	J
.280	.310	.220	.100	.112	.055	.100	.030	.030
7.112	7.874	5.588	2.540	2.845	1.397	2.540	0.762	0.762
K	L	M	N	P	Q	R	S	T
.065	.300							
1.651	7.620							

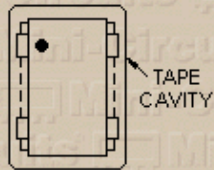
Tolerance: .x ± .1 .xx ± .03 .xxx ± .015 inch.

Material and Finish:

Case material: plastic. Lead finish: tin-lead plate or tin plate.

Packaging:

UNIT ORIENTATION

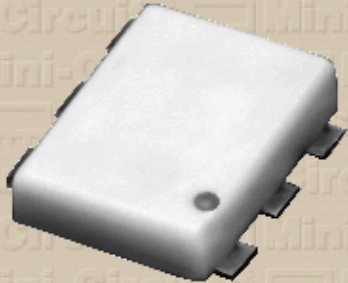


Packaging information:
Tape Width(mm): 16
Reel Size(inches): 13
Device Cavity Pitch(mm): 12
Devices Per Reel: 1000

Notes:

- +17 dBm LO, up to +14 dBm RF
- Absolute maximum power, voltage and current ratings:
 - a. RF power, 200mW
 - b. Peak IF current, 40mA
- For Surface Mount Environmental Specifications, please click [here](#).
- General Quality Control Procedures and Environmental Specifications are given in [Mini-Circuits Guarantees Quality](#). Hi-Rel, MIL description are given in [Hi-Rel and MIL](#).
- Prices and Specifications subjects to change without notice.

ADE-12H



Electrical Specifications

ADE-12H		LO Power Level 17 dBm								
Frequency MHz		Max. Conversion Loss dB		Min. LO-RF Isolation dB			Min. LO-IF Isolation dB			
LO/RF	IF	Mid-Band Total Range		L	M	U	L	M	U	
500-1200	DC-250	8.2		25	25	25	20	20	20	

L=low range(f_L to $10f_L$) M=mid range($10f_L$ to $f_U/2$) U=upper range($f_U/2$ to f_U)

Typical Performance Data

ADE-12H		Conversion Loss (dB)			ISO LO (MHz)	Isolation L-R (dB)			Isolation L-I (dB)		
RF MHz	LO MHz	LO +14 dBm	LO +17 dBm	LO +20 dBm		LO +14 dBm	LO +17 dBm	LO +20 dBm	LO +14 dBm	LO +17 dBm	LO +20 dBm
500.000	530.000	12.08	6.78	5.98	530.000	42.20	39.10	40.30	35.00	33.60	33.00
539.376	569.376	8.99	6.29	5.89	569.376	38.00	38.60	40.80	32.60	33.70	32.70
581.852	611.852	9.47	6.47	5.87	611.852	37.20	37.90	39.60	33.90	35.00	33.10
600.000	630.000	9.80	6.60	6.00	630.000	37.00	37.70	39.50	34.10	35.20	33.70
627.673	657.673	7.34	6.14	5.84	657.673	35.00	36.60	39.00	34.10	34.00	32.40
650.000	680.000	7.20	6.10	5.90	680.000	34.70	36.20	38.70	34.50	33.80	31.80
677.104	707.104	8.29	6.29	5.79	707.104	34.70	36.60	39.20	34.70	35.40	32.50
700.000	730.000	7.56	6.16	5.96	730.000	34.10	36.20	39.30	35.00	34.60	32.00
730.426	760.426	7.12	6.12	5.82	760.426	33.00	35.30	38.50	34.70	32.90	30.40
750.000	780.000	7.63	6.43	5.93	780.000	33.00	35.00	38.20	35.00	33.60	30.90
787.948	817.948	7.41	6.21	5.81	817.948	32.30	34.70	37.80	34.00	32.60	31.40
800.000	830.000	7.12	6.32	5.92	830.000	32.20	34.60	37.70	33.10	31.90	30.90
850.000	880.000	7.81	6.41	5.91	880.000	32.40	35.20	38.30	33.90	31.30	30.40
900.000	930.000	7.23	6.33	5.83	930.000	31.80	34.60	37.20	31.50	28.90	27.80
950.000	980.000	7.64	6.24	5.74	980.000	31.80	34.70	36.90	34.10	30.20	28.30
1000.000	1030.000	7.00	6.00	5.60	1030.000	32.20	34.90	36.50	32.40	29.20	26.90
1050.000	1080.000	7.25	6.15	5.85	1080.000	32.80	35.60	37.10	31.30	30.00	28.10
1100.000	1130.000	7.54	6.44	5.94	1130.000	32.80	35.60	36.70	30.40	29.20	27.80
1150.000	1180.000	7.40	6.50	6.00	1180.000	32.70	34.90	35.80	28.50	27.90	27.20
1200.000	1230.000	8.08	6.78	6.08	1230.000	32.00	34.10	35.00	28.20	28.30	27.80

RF/LO		VSWR RF port			VSWR LO port			IF		VSWR IF port		
FREQ. (MHz)	LO +14 dBm	LO +17 dBm	LO +20 dBm	LO +14 dBm	LO +17 dBm	LO +20 dBm	FREQ. (MHz)	LO +14 dBm	LO +17 dBm	LO +20 dBm		
530.000	9.69	6.05	3.38	6.49	3.50	2.92	10.000	4.12	1.31	1.04		
569.376	9.69	4.64	3.11	5.03	3.26	3.01	22.632	3.86	1.30	1.05		
611.852	12.44	5.49	3.38	5.17	3.21	2.92	35.263	4.12	1.31	1.05		
630.000	7.28	4.12	2.80	5.17	3.21	2.92	47.895	3.86	1.30	1.06		
657.673	7.94	3.64	2.80	3.50	2.96	2.84	60.526	4.12	1.32	1.07		
680.000	13.39	4.64	3.44	3.38	2.92	2.80	73.158	3.79	1.29	1.08		
707.104	9.69	4.22	3.06	3.95	3.01	2.80	85.790	4.03	1.31	1.09		
730.000	6.49	3.21	2.55	3.57	3.01	2.84	98.421	3.71	1.29	1.10		
760.426	7.28	3.44	3.11	3.32	3.01	2.84	111.053	3.95	1.31	1.11		
780.000	10.89	3.86	3.32	3.44	2.92	2.72	123.684	3.57	1.28	1.12		

817.948	6.05	3.06	2.61	3.38	2.92	2.76	136.316	3.79	1.30	1.13
830.000	5.03	2.96	2.65	3.16	2.84	2.68	148.947	3.50	1.28	1.13
880.000	8.31	3.64	3.26	3.50	2.96	2.76	161.579	3.64	1.29	1.14
930.000	4.64	2.92	2.92	3.16	2.88	2.68	174.210	3.38	1.27	1.14
980.000	7.28	3.32	3.01	3.21	2.61	2.49	186.842	3.50	1.28	1.15
1030.000	4.32	2.92	3.06	2.80	2.43	2.23	199.474	3.38	1.27	1.15
1080.000	5.33	3.16	3.06	2.80	2.49	2.30	212.105	3.50	1.29	1.16
1130.000	4.32	2.88	3.01	2.88	2.55	2.40	224.737	3.21	1.27	1.16
1180.000	4.22	3.16	3.38	2.88	2.61	2.46	237.368	3.44	1.28	1.17
1230.000	4.32	2.96	3.38	3.16	2.76	2.55	250.000	3.21	1.27	1.17

Click Above for Actual Performance Data.



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