

Non-Catalog Model

Frequency Mixer

HUD-19SH

Level 19 (LO Power +19 dBm)

Important Note

This is a non-catalog model and can be manufactured on specific request.
Pricing and delivery information can be supplied upon request.



Please click "Back", and then click "Contact Us" for Applications support.

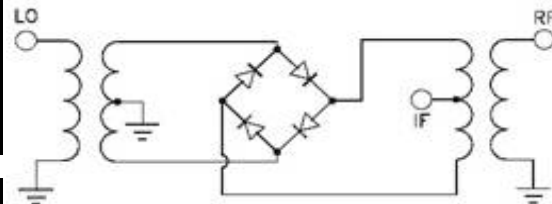
CASE STYLE : BK276

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C					
Parameter		Min.	Typ.	Max.	Units
Frequency	LO (fL to fU)	1819		1910	MHz
	RF (fL to fU)	1819		1910	MHz
	IF	50		200	MHz
Conversion Loss			7.5	8.9	dB
LO-RF Isolation		27	38		dB
LO-IF Isolation		25	36		dB
IP3 Input			+38		dBm
1 dB Comp. Input Power			+22		dBm

MAXIMUM RATINGS	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	160mW
IF Current	-

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

Electrical Schematics



Frequency Mixer

HUD-19SH

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	CONVERSION LOSS (dB)			LO (MHz)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)			RF (IN) (MHz)	LO (MHz)	IP-3 Input (dBm)		
		@LO (dBm)				@LO (dBm)			@LO (dBm)					@LO (dBm)		
		+16	+19	+22		+16	+19	+22	+16	+19	+22			+16	+19	+22
1819.0	1710.0	7.27	6.93	6.80	1710.0	47.86	46.49	46.54	37.41	37.48	37.63	1819.0	1710.0	27.66	36.38	39.13
1828.1	1715.9	7.28	6.96	6.84	1715.9	47.90	46.95	47.04	37.56	37.62	37.78	1828.1	1715.9	28.27	36.70	39.04
1837.2	1721.8	7.30	7.02	6.89	1721.8	48.09	47.36	47.50	37.66	37.74	37.93	1837.2	1721.8	28.93	36.78	39.39
1846.3	1727.7	7.31	7.07	6.97	1727.7	48.44	47.80	47.93	37.72	37.84	38.06	1846.3	1727.7	29.62	38.11	39.96
1855.4	1733.6	7.31	7.10	7.00	1733.6	48.91	48.27	48.32	37.80	37.96	38.20	1855.4	1733.6	29.93	38.87	40.18
1864.5	1739.5	7.28	7.07	6.99	1739.5	49.52	48.76	48.81	37.91	38.11	38.43	1864.5	1739.5	30.27	39.72	39.99
1873.6	1745.4	7.32	7.11	7.02	1745.4	50.22	49.53	49.38	38.11	38.36	38.73	1873.6	1745.4	30.27	38.11	40.52
1882.7	1751.3	7.34	7.14	7.06	1751.3	51.35	50.50	50.08	38.42	38.68	39.06	1882.7	1751.3	30.34	38.39	40.29
1891.8	1757.2	7.37	7.18	7.09	1757.2	52.76	51.57	50.71	38.80	39.07	39.48	1891.8	1757.2	30.10	38.17	40.40
1900.9	1763.1	7.37	7.16	7.07	1763.1	54.42	52.74	51.35	39.27	39.53	39.94	1900.9	1763.1	30.00	39.39	40.30
1910.0	1769.0	7.39	7.18	7.08	1769.0	56.45	53.98	51.94	39.75	40.01	40.39	1910.0	1769.0	29.90	39.22	40.22



ISO 9001 ISO 14001 AS 9100 CERTIFIED

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The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

RF/MICROWAVE COMPONENTS

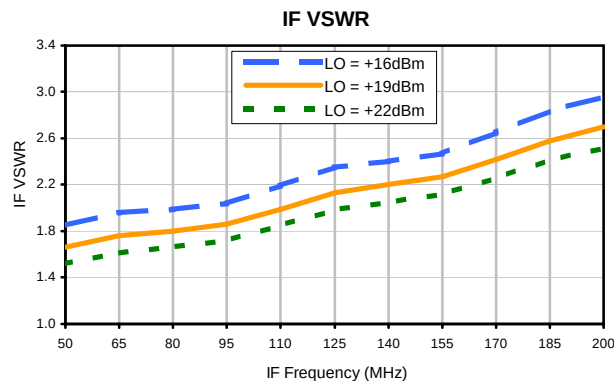
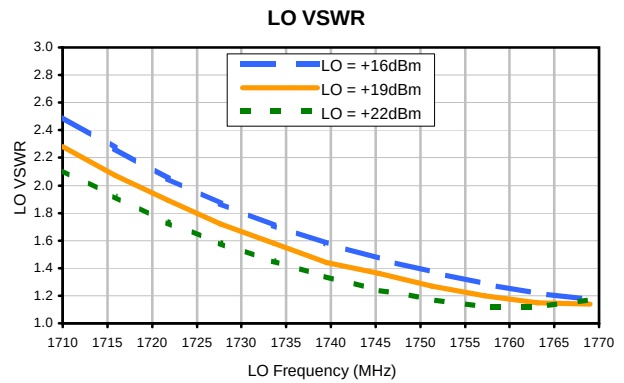
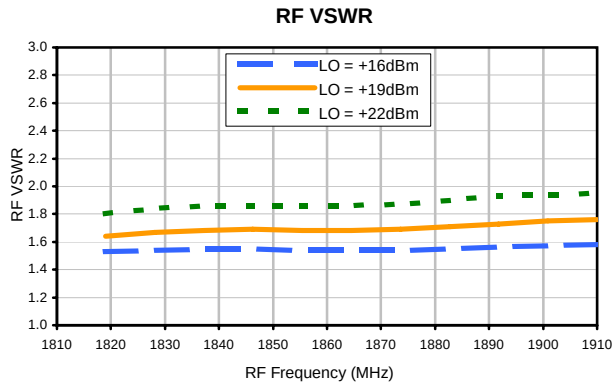
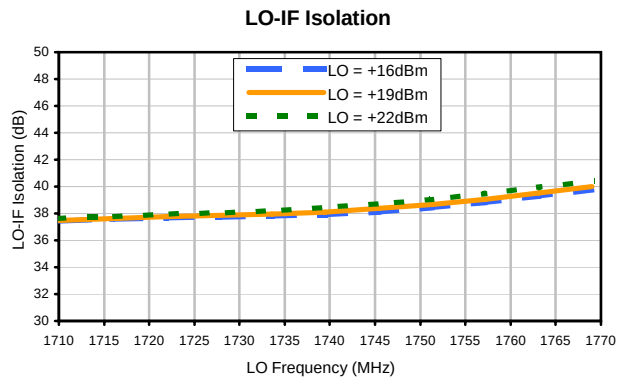
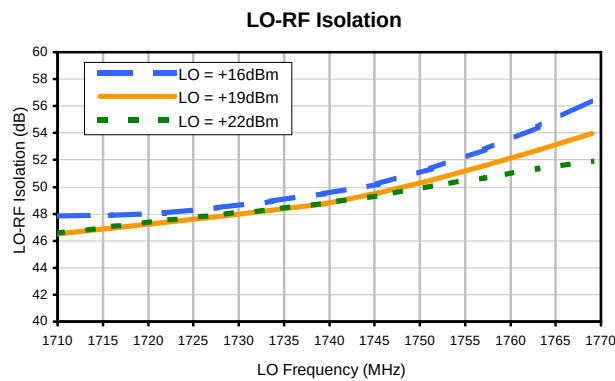
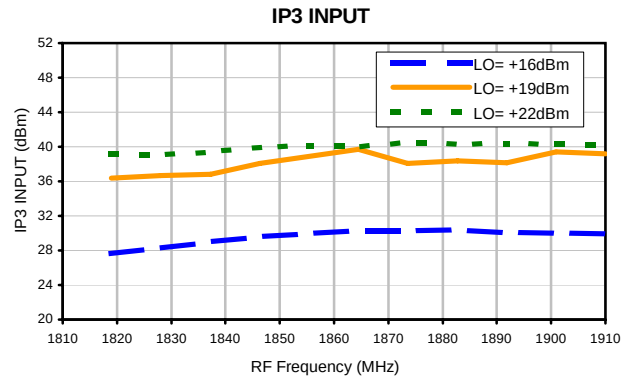
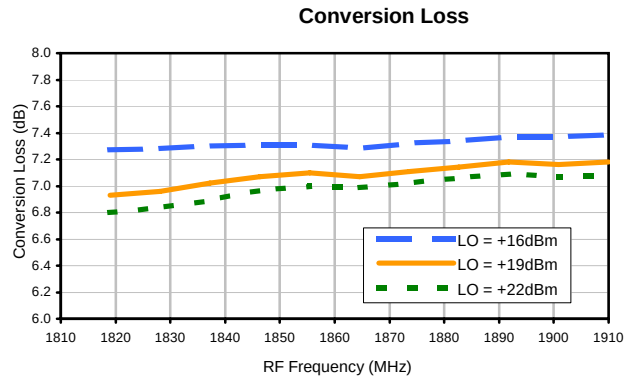


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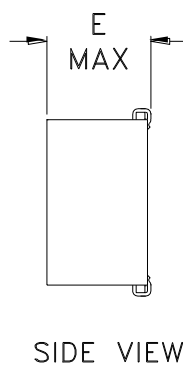
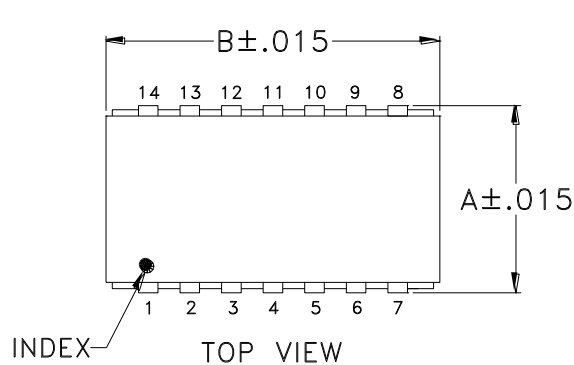
Typical Performance Data

RF (IN) (MHz)	LO (MHz)	RF VSWR (:1)			LO (MHz)	LO VSWR (:1)			IF (OUT) (MHz)	IF VSWR (:1)		
		@LO (dBm)				@LO (dBm)				@LO (dBm)		
		+16	+19	+22		+16	+19	+22		+16	+19	+22
1819.0	1710.0	1.53	1.64	1.80	1710.0	2.50	2.28	2.11	50.0	1.85	1.66	1.52
1828.1	1715.9	1.54	1.67	1.84	1715.9	2.27	2.07	1.92	65.0	1.96	1.76	1.61
1837.2	1721.8	1.55	1.68	1.86	1721.8	2.05	1.89	1.73	80.0	1.99	1.80	1.66
1846.3	1727.7	1.55	1.69	1.86	1727.7	1.87	1.72	1.58	95.0	2.04	1.86	1.72
1855.4	1733.6	1.54	1.68	1.86	1733.6	1.71	1.58	1.45	110.0	2.19	1.99	1.85
1864.5	1739.5	1.54	1.68	1.86	1739.5	1.58	1.44	1.34	125.0	2.35	2.13	1.98
1873.6	1745.4	1.54	1.69	1.87	1745.4	1.47	1.36	1.24	140.0	2.40	2.20	2.05
1882.7	1751.3	1.55	1.71	1.90	1751.3	1.37	1.27	1.17	155.0	2.47	2.27	2.12
1891.8	1757.2	1.56	1.73	1.93	1757.2	1.29	1.20	1.12	170.0	2.65	2.42	2.26
1900.9	1763.1	1.57	1.75	1.94	1763.1	1.22	1.15	1.12	185.0	2.84	2.58	2.41
1910.0	1769.0	1.58	1.76	1.95	1769.0	1.17	1.14	1.17	200.0	2.96	2.70	2.52

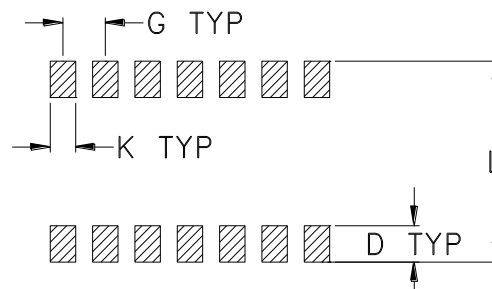
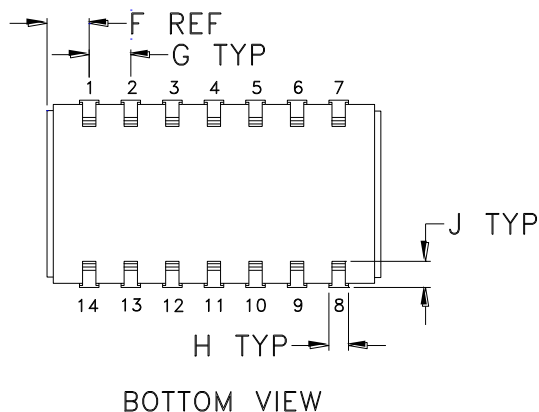
Typical Performance Curves



Outline Dimensions



PCB Land Pattern



CASE #	A	B	C	D	E	F	G	H	J	K	L	WT. GRAM
BK276	.450 (11.43)	.803 (20.40)	-- --	.100 (2.54)	.250 (6.35)	.102 (2.59)	.100 (2.54)	.047 (1.19)	.065 (1.65)	.065 (1.65)	.470 (11.94)	2.0 MAX.

Dimensions are in inches (mm). Tolerances: 2Pl. $\pm .01$; 3Pl. $\pm .005$

Notes:

- Case material: Copper Nickel alloy.
- Base material: Printed wiring laminate.
- Termination finish:

For RoHS Case Styles: Tin plate over Nickel plate. All models, (+) suffix.

For RoHS-5 Case Styles: Tin-Lead plate. All models, no (+) suffix.



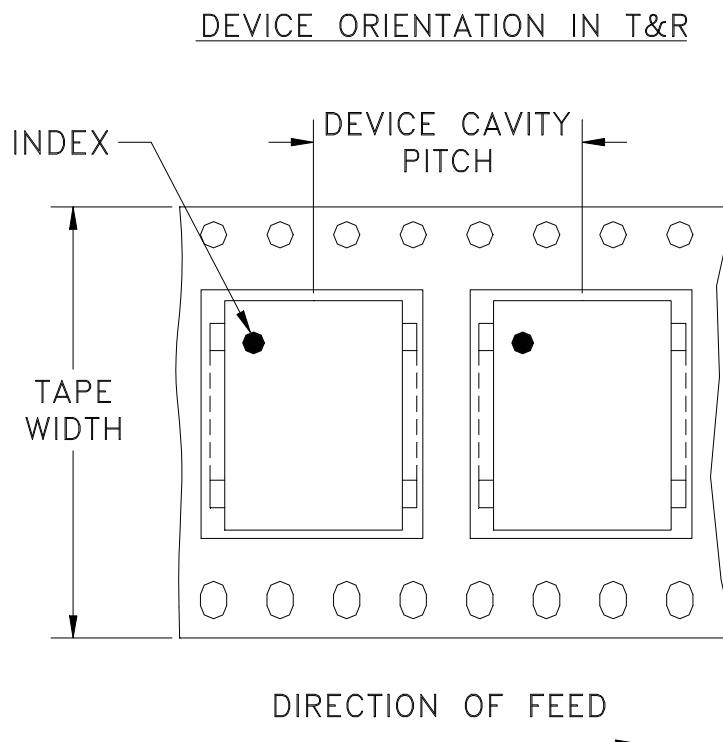
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32	16	13	500

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