

Frequency Mixer

JTFM-ED9835/1

Level 1 (LO Power +1 dBm)

Important Note

This model has been designed, built and tested in our engineering department. Performance data represents model capability. At present it is a non-catalog model. On request, we can supply a final specification sheet, part number and price/delivery information.



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 (f _L to f _U)	1705		2930	MHz
	RF (f _L to f _U)	1705		2930	MHz
	IF	83.6		258.6	MHz
Conversion Loss			9.0		dB
LO-RF Isolation			20		dB
LO-IF Isolation			23		dB
IP3 Input			+34		dBm

MAXIMUM RATINGS	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C

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

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Typical Performance Data

RF (MHz)	LO (MHz)	CONVERSION LOSS (dB)			LO (MHz)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)			LO (MHz)	RF (MHz)	IP-3 Input (dBm)
		@LO (dBm)				@LO (dBm)			@LO (dBm)					@LO (dBm)
		-2	+1	+4		-2	+1	+4	-2	+1	+4			+1
1705.0	1735.0	9.36	8.87	8.54	1735.0	26.1	27.9	31.3	20.0	20.5	21.8	1953.6	1705.0	29.5
1740.0	1770.0	9.07	8.60	8.29	1770.0	25.0	27.0	30.0	20.4	21.0	22.4	1963.6	1720.0	29.6
1775.0	1805.0	8.63	8.23	7.99	1805.0	24.8	26.8	29.6	20.6	21.8	23.1	1973.6	1735.0	29.6
1810.0	1840.0	8.52	8.16	7.94	1840.0	24.3	25.9	28.3	21.0	22.3	23.9	1983.6	1750.0	29.5
1845.0	1875.0	8.10	7.80	7.61	1875.0	23.7	25.2	27.5	21.0	22.9	25.0	1993.6	1765.0	29.5
1880.0	1910.0	7.97	7.73	7.61	1910.0	22.7	24.2	26.4	20.6	22.5	25.0	2003.6	1780.0	29.8
1950.0	1980.0	7.56	7.42	7.35	1980.0	19.3	20.4	22.1	20.5	23.2	26.4	2023.6	1810.0	30.7
1985.0	2015.0	7.35	7.28	7.25	2015.0	17.0	18.0	19.8	22.1	26.0	32.5	2033.6	1825.0	31.4
2020.0	2050.0	7.40	7.35	7.32	2050.0	14.8	16.1	17.4	27.1	37.4	38.1	2043.6	1840.0	32.4
2055.0	2085.0	7.19	7.18	7.18	2085.0	13.2	14.8	16.4	30.4	29.6	27.0	2053.6	1855.0	33.9
2090.0	2120.0	7.46	7.45	7.49	2120.0	12.5	14.4	16.0	24.8	25.0	24.4	2063.6	1870.0	35.8
2125.0	2155.0	7.27	7.25	7.24	2155.0	13.1	15.3	17.5	25.3	28.9	31.1	2073.6	1885.0	37.9
2160.0	2190.0	7.47	7.45	7.44	2190.0	13.5	15.4	17.4	25.6	29.5	31.9	2083.6	1900.0	39.2
2195.0	2225.0	7.44	7.42	7.43	2225.0	14.5	16.1	18.3	23.8	27.9	31.3	2093.6	1915.0	38.2
2230.0	2260.0	7.61	7.57	7.55	2260.0	15.6	17.2	19.5	22.5	26.2	29.5	2103.6	1930.0	37.2
2265.0	2295.0	7.52	7.50	7.48	2295.0	16.0	17.7	20.1	20.8	24.0	27.2	2113.6	1945.0	39.5
2300.0	2330.0	7.79	7.74	7.70	2330.0	16.9	18.7	20.6	19.8	23.2	26.3	2123.6	1960.0	37.6
2335.0	2365.0	7.69	7.62	7.57	2365.0	18.9	20.8	22.3	19.5	22.8	25.3	2133.6	1975.0	35.4
2370.0	2400.0	7.95	7.85	7.79	2400.0	20.4	22.4	24.4	19.0	22.1	24.7	2143.6	1990.0	36.1
2405.0	2435.0	7.93	7.79	7.71	2435.0	22.4	24.5	26.7	18.4	21.5	24.4	2153.6	2005.0	37.5
2440.0	2470.0	8.21	8.04	7.93	2470.0	24.4	26.4	28.5	17.9	20.7	23.6	2163.6	2020.0	38.5
2475.0	2505.0	8.20	8.00	7.88	2505.0	26.4	28.4	30.8	17.3	20.0	23.0	2173.6	2035.0	38.3
2510.0	2540.0	8.50	8.26	8.10	2540.0	27.7	29.9	32.4	17.0	19.9	22.9	2183.6	2050.0	37.6
2545.0	2575.0	8.55	8.28	8.07	2575.0	29.1	31.6	34.9	17.1	20.3	23.7	2193.6	2065.0	36.7
2580.0	2610.0	8.69	8.43	8.24	2610.0	30.8	33.9	37.3	17.6	21.0	24.4	2203.6	2080.0	35.9
2615.0	2645.0	8.80	8.48	8.25	2645.0	32.7	36.3	39.6	18.4	22.0	25.8	2213.6	2095.0	35.4
2650.0	2680.0	8.91	8.60	8.37	2680.0	31.2	34.0	36.5	19.4	23.3	27.6	2223.6	2110.0	35.2
2685.0	2715.0	8.97	8.60	8.37	2715.0	27.2	29.9	32.4	20.4	24.8	29.6	2233.6	2125.0	34.7
2720.0	2750.0	9.10	8.75	8.52	2750.0	23.9	26.9	29.6	22.1	27.2	32.5	2243.6	2140.0	34.4
2755.0	2785.0	9.27	8.87	8.62	2785.0	21.5	24.4	27.4	24.3	30.1	36.1	2253.6	2155.0	33.9
2790.0	2820.0	9.17	8.83	8.62	2820.0	19.3	22.6	25.7	27.0	34.4	42.6	2263.6	2170.0	33.9
2825.0	2855.0	9.63	9.25	9.00	2855.0	18.1	21.5	24.8	31.7	41.6	56.5	2273.6	2185.0	34.2
2860.0	2890.0	9.40	9.09	8.89	2890.0	16.6	20.4	23.7	36.7	40.2	41.3	2283.6	2200.0	33.9
2895.0	2925.0	9.88	9.54	9.32	2925.0	15.9	19.4	22.8	33.2	33.6	35.7	2293.6	2215.0	33.7
2930.0	2960.0	9.76	9.45	9.26	2960.0	14.8	18.2	21.6	27.6	28.8	31.4	2303.6	2230.0	33.4

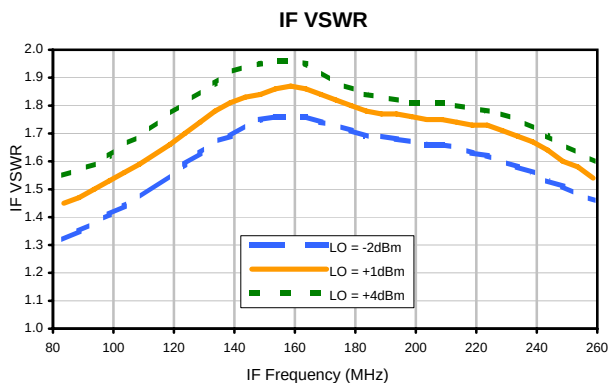
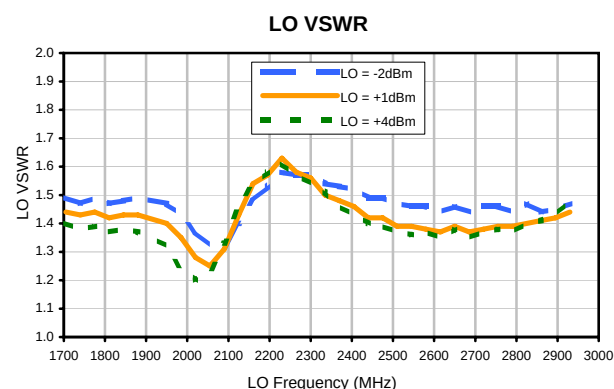
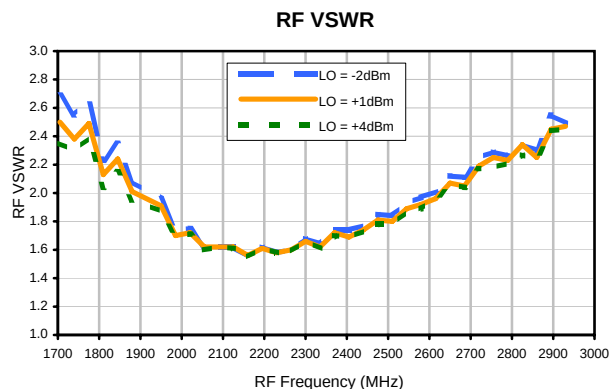
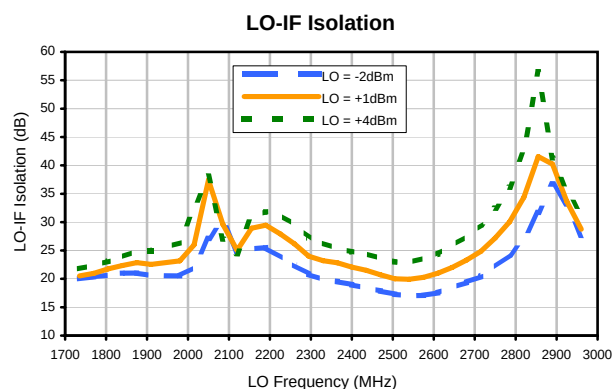
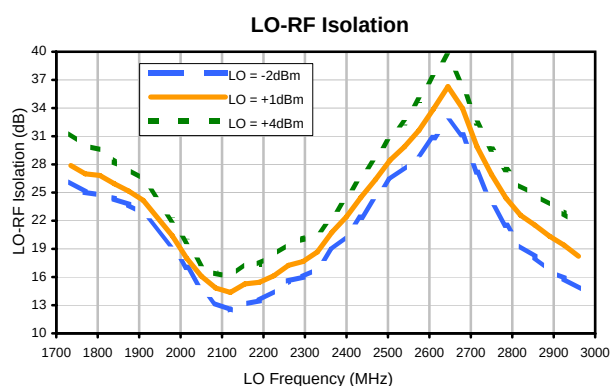
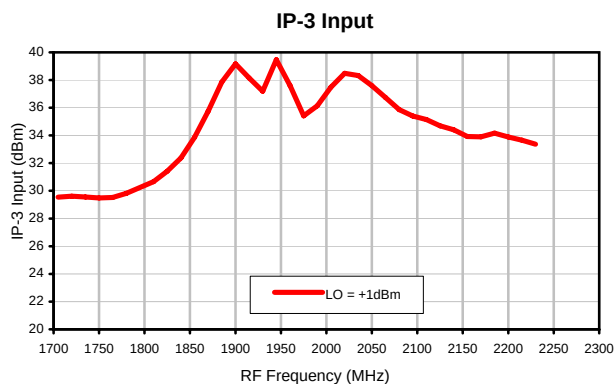
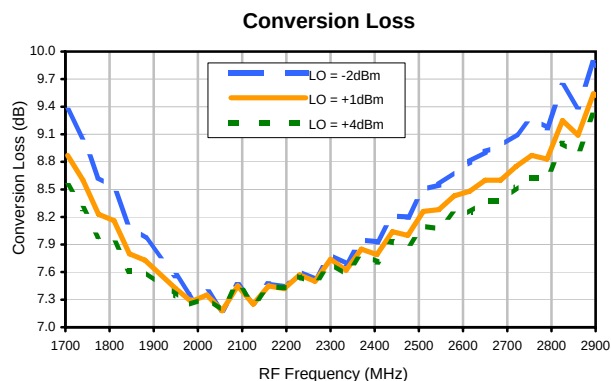
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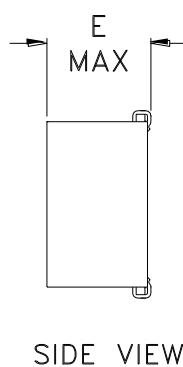
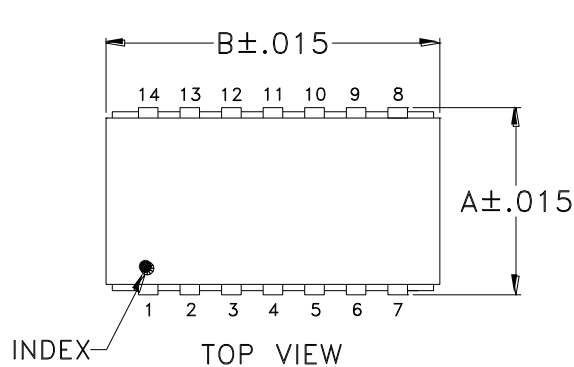
Typical Performance Data

RF/LO (MHz)	RF VSWR (:1)			LO VSWR (:1)			IF (MHz)	IF VSWR (:1)		
	@LO (dBm)			@LO (dBm)				@LO (dBm)		
	-2	+1	+4	-2	+1	+4		-2	+1	+4
1705.0	2.69	2.50	2.35	1.49	1.44	1.40	83.6	1.32	1.45	1.55
1740.0	2.55	2.38	2.30	1.47	1.43	1.38	88.6	1.35	1.47	1.57
1775.0	2.65	2.49	2.39	1.49	1.44	1.39	93.6	1.38	1.50	1.59
1810.0	2.23	2.13	2.04	1.47	1.42	1.37	98.6	1.41	1.53	1.62
1845.0	2.35	2.24	2.15	1.48	1.43	1.38	103.6	1.44	1.56	1.66
1880.0	2.08	2.01	1.95	1.49	1.43	1.37	108.6	1.47	1.59	1.69
1950.0	1.96	1.91	1.87	1.47	1.40	1.32	118.6	1.55	1.66	1.77
1985.0	1.74	1.70	1.70	1.43	1.35	1.24	123.6	1.59	1.70	1.81
2020.0	1.75	1.72	1.71	1.37	1.28	1.20	128.6	1.63	1.74	1.85
2055.0	1.62	1.62	1.60	1.32	1.25	1.23	133.6	1.67	1.78	1.88
2090.0	1.62	1.62	1.62	1.32	1.31	1.33	138.6	1.69	1.81	1.92
2125.0	1.62	1.62	1.61	1.40	1.43	1.46	143.6	1.73	1.83	1.94
2160.0	1.55	1.56	1.55	1.48	1.54	1.54	148.6	1.75	1.84	1.95
2195.0	1.62	1.61	1.61	1.53	1.57	1.58	153.6	1.76	1.86	1.96
2230.0	1.58	1.58	1.58	1.58	1.63	1.61	158.6	1.76	1.87	1.96
2265.0	1.60	1.60	1.59	1.57	1.58	1.57	163.6	1.76	1.86	1.95
2300.0	1.68	1.66	1.66	1.57	1.56	1.54	168.6	1.74	1.84	1.92
2335.0	1.64	1.62	1.61	1.54	1.50	1.51	173.6	1.73	1.82	1.88
2370.0	1.74	1.72	1.70	1.53	1.48	1.46	178.6	1.71	1.80	1.86
2405.0	1.74	1.69	1.69	1.52	1.46	1.43	183.6	1.69	1.78	1.84
2440.0	1.77	1.74	1.73	1.49	1.42	1.40	188.6	1.69	1.77	1.83
2475.0	1.85	1.81	1.78	1.49	1.42	1.39	193.6	1.68	1.77	1.82
2510.0	1.84	1.80	1.78	1.47	1.39	1.37	198.6	1.67	1.76	1.81
2545.0	1.93	1.89	1.87	1.46	1.39	1.36	203.6	1.66	1.75	1.81
2580.0	1.97	1.92	1.89	1.46	1.38	1.37	208.6	1.66	1.75	1.81
2615.0	2.01	1.96	1.95	1.44	1.37	1.35	213.6	1.65	1.74	1.80
2650.0	2.12	2.07	2.06	1.46	1.39	1.38	218.6	1.63	1.73	1.79
2685.0	2.11	2.05	2.04	1.44	1.37	1.35	223.6	1.62	1.73	1.78
2720.0	2.25	2.19	2.17	1.46	1.38	1.37	228.6	1.60	1.71	1.77
2755.0	2.29	2.25	2.18	1.46	1.39	1.38	233.6	1.58	1.69	1.75
2790.0	2.26	2.23	2.21	1.44	1.39	1.37	238.6	1.56	1.67	1.72
2825.0	2.34	2.34	2.27	1.47	1.40	1.40	243.6	1.53	1.64	1.69
2860.0	2.30	2.25	2.24	1.44	1.41	1.41	248.6	1.51	1.60	1.66
2895.0	2.55	2.45	2.44	1.45	1.42	1.43	253.6	1.48	1.58	1.63
2930.0	2.49	2.47	2.45	1.47	1.44	1.48	258.6	1.46	1.54	1.60

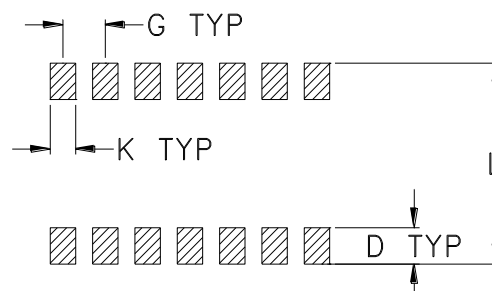
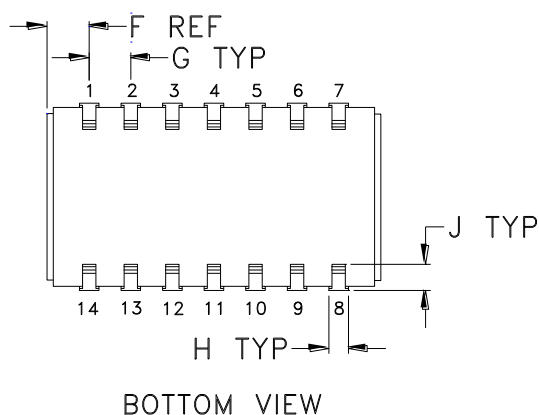
Typical Performance Curves



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.



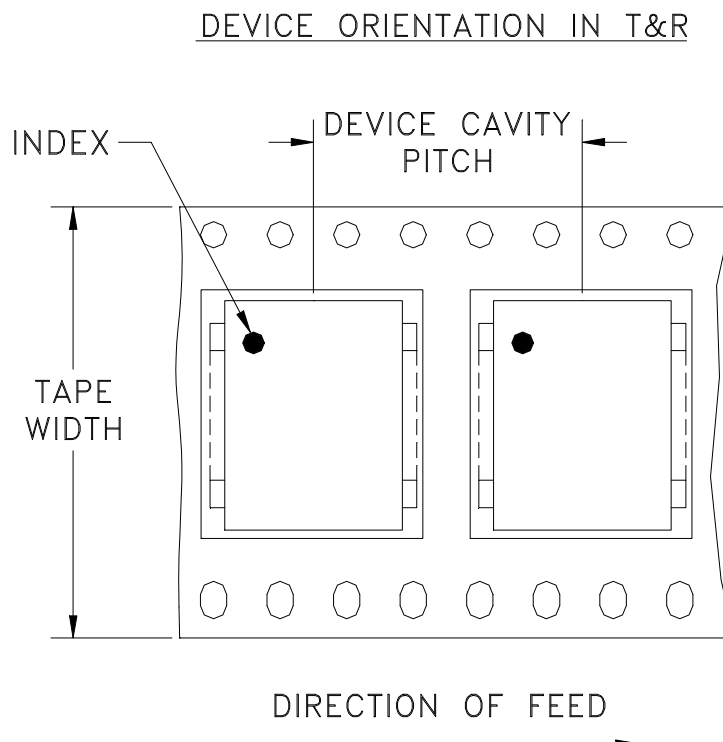
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Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel
32	16	13	500

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