

Surface Mount Frequency Mixer

JYM-28H+ JYM-28H

Level 17 (LO Power +17 dBm) 400 to 2800 MHz



CASE STYLE: BJ293

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

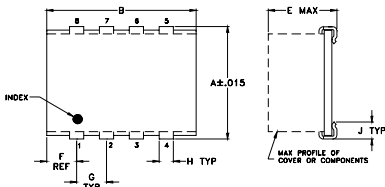
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA
Permanent damage may occur if any of these limits are exceeded.	

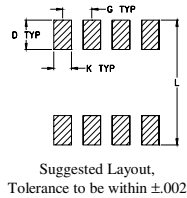
Pin Connections

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

Outline Drawing



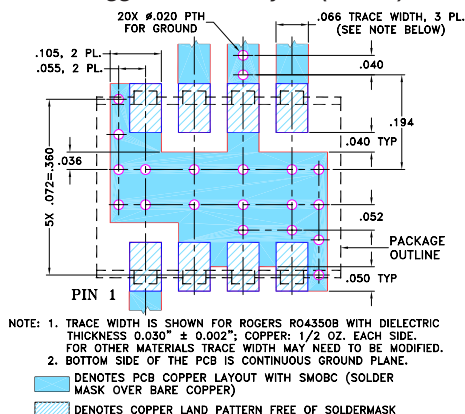
PCB Land Pattern



Outline Dimensions (inch)

A	B	C	D	E	F	G	H	J	K	L	wt
.395	.500	--	.100	.230	.100	.100	.047	.065	.065	.425	grams
10.03	12.70	--	2.54	5.84	2.54	2.54	1.19	1.65	1.65	10.80	0.80

Demo Board MCL P/N: TB-259 Suggested PCB Layout (PL-080)



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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Features

- wide bandwidth, 400 to 2800 MHz
- good IP3, 23 dBm typ.
- high L-R isolation, 40 dB typ.

Applications

- cellular
- satellite distribution
- PCS, DCS, UMTS
- MMDS

Electrical Specifications

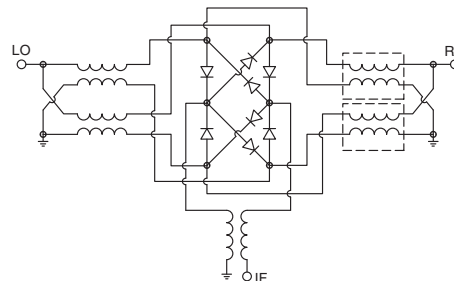
FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)
		Typ.	Min.	Typ.	Min.	
400-2800	4-700	6.3	.20	8.0	9.0	23

Mid-Band m
Total Range Max.
1 dB COMP: +10 dBm typ.
m=mid band [2f_L to f_H/2]

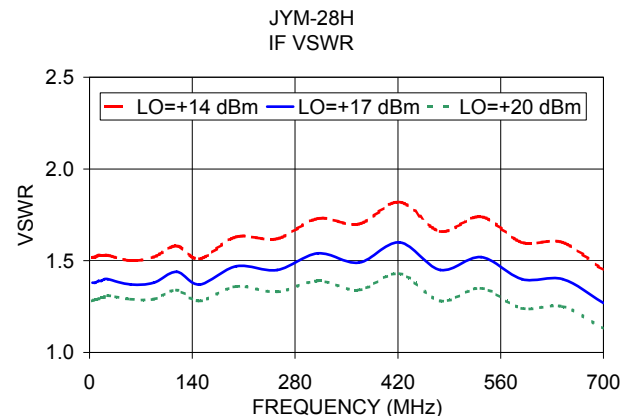
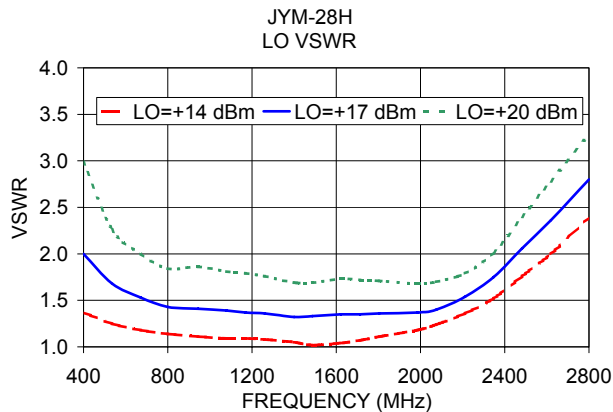
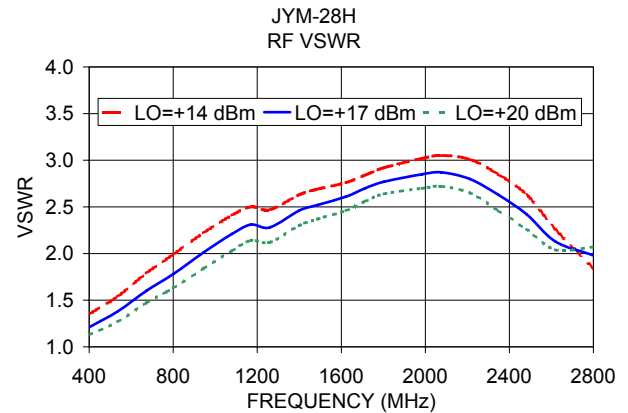
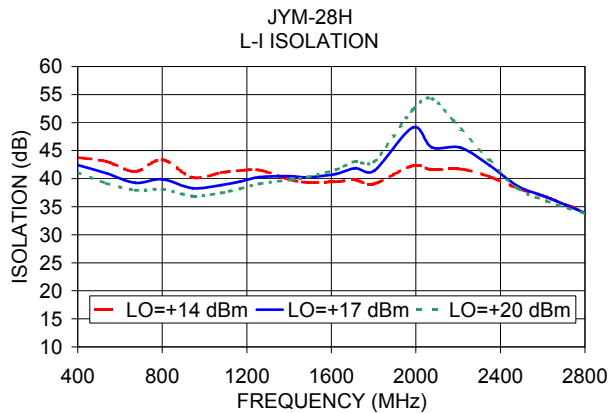
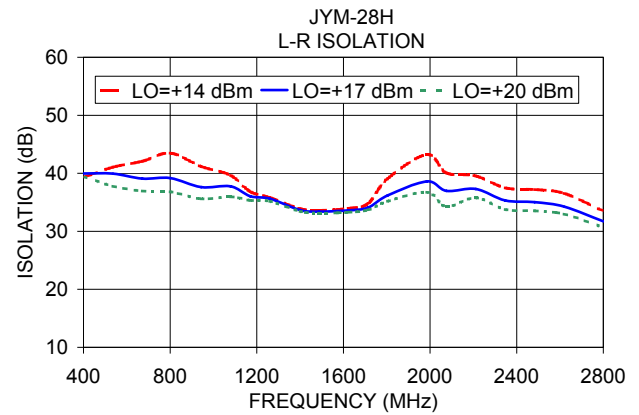
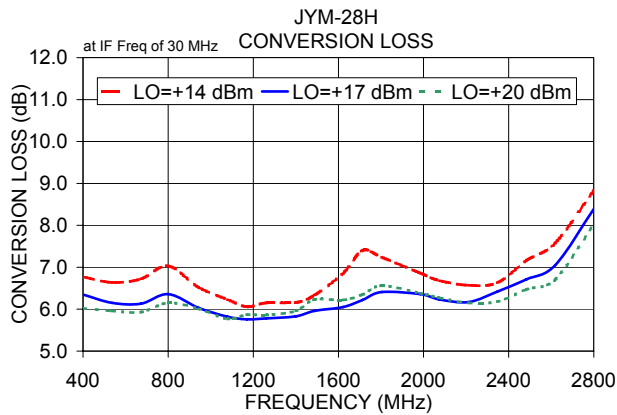
Typical Performance Data

Frequency (MHz)		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm
400.00	430.00	6.35	39.96	42.42	1.21	2.00
535.85	565.85	6.15	39.94	40.97	1.38	1.68
671.70	701.70	6.13	39.08	39.25	1.60	1.53
800.00	830.00	6.36	39.17	39.90	1.78	1.43
943.40	973.40	6.03	37.63	38.28	2.01	1.41
1079.25	1109.25	5.82	37.76	38.87	2.21	1.39
1169.81	1199.81	5.76	36.05	39.48	2.31	1.37
1260.38	1290.38	5.78	35.62	40.30	2.28	1.36
1400.00	1430.00	5.83	33.66	40.46	2.46	1.32
1486.79	1516.79	5.96	33.40	40.25	2.52	1.33
1622.64	1652.64	6.05	33.61	40.84	2.61	1.35
1713.21	1683.21	6.22	34.09	41.86	2.70	1.35
1803.77	1773.77	6.41	36.18	41.43	2.77	1.36
1984.91	1954.91	6.36	38.60	49.09	2.85	1.37
2075.47	2045.47	6.23	36.96	45.57	2.87	1.40
2211.32	2181.32	6.17	37.30	45.52	2.80	1.54
2347.17	2317.17	6.42	35.31	42.38	2.63	1.75
2483.02	2453.02	6.71	35.03	38.65	2.42	2.06
2618.87	2588.87	7.05	34.27	36.72	2.13	2.36
2800.00	2770.00	8.39	31.73	33.90	1.98	2.80

Electrical Schematic



Performance Charts



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