

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

Maximum Ratings

Operating Temperature -40°C to 85°C

Storage Temperature -55°C to 100°C

RF Power 200mW

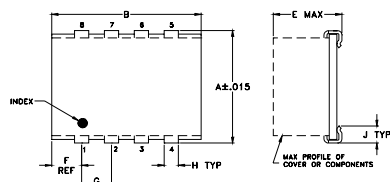
IF Current 40mA

Permanent damage may occur if any of these limits are exceeded.

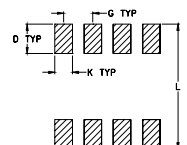
Pin Connections

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

Outline Drawing



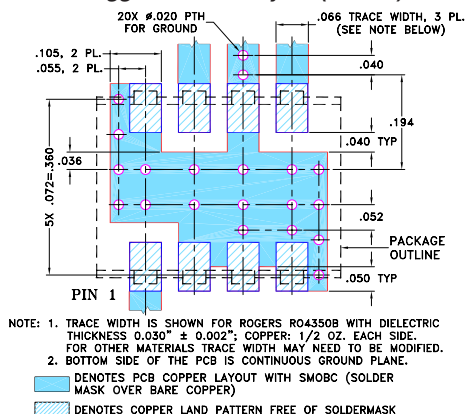
PCB Land Pattern

Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch)

A	B	C	D	E	F	G
.395	.500	--	.100	.230	.100	.100
10.03	12.70	--	2.54	5.84	2.54	2.54

H	J	K	L	wt
.047	.065	.065	.425	grams
1.19	1.65	1.65	10.80	0.80

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

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



CASE STYLE: BJ293

Electrical Specifications

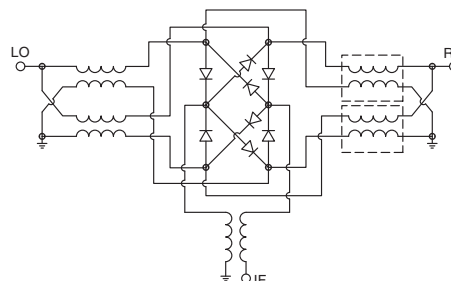
FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)
		Typ.	Min.	Typ.	Min.	
400-2800	4-700	6.3	.20	8.0	9.0	23

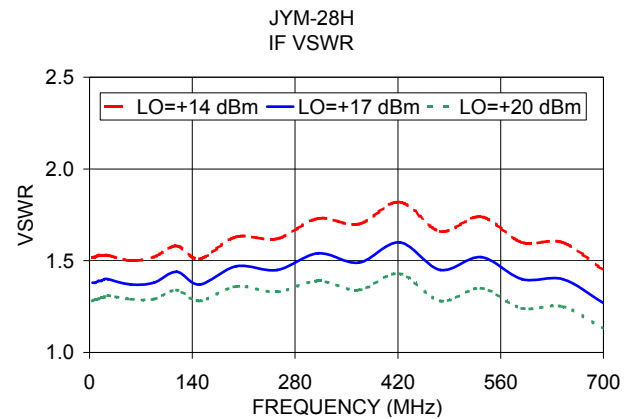
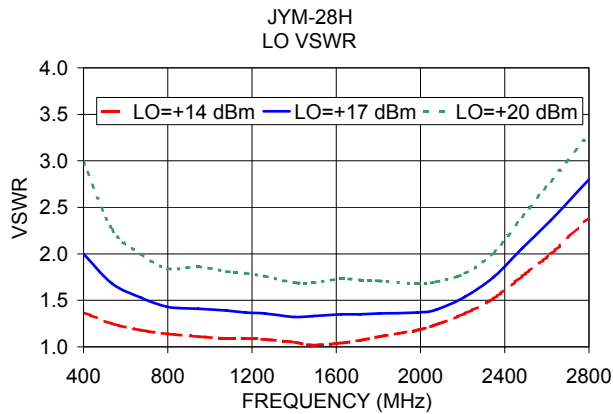
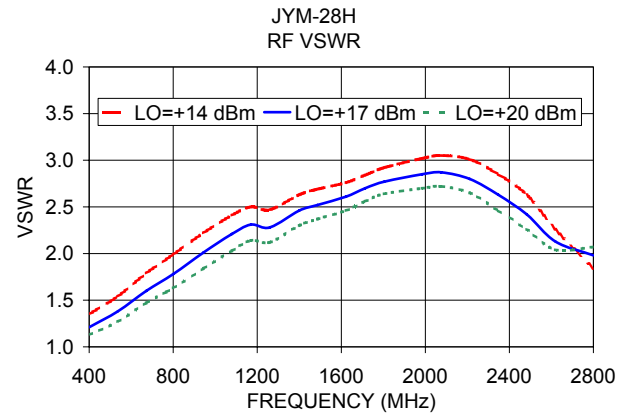
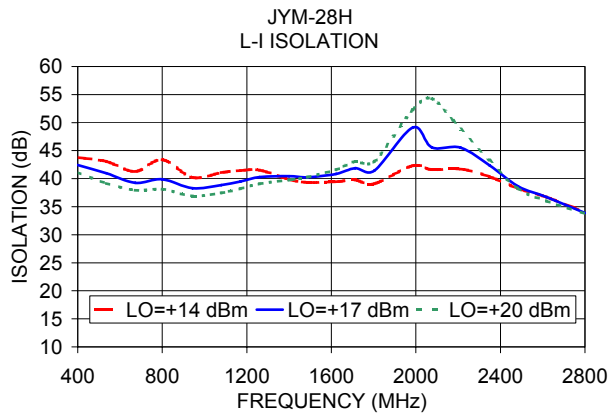
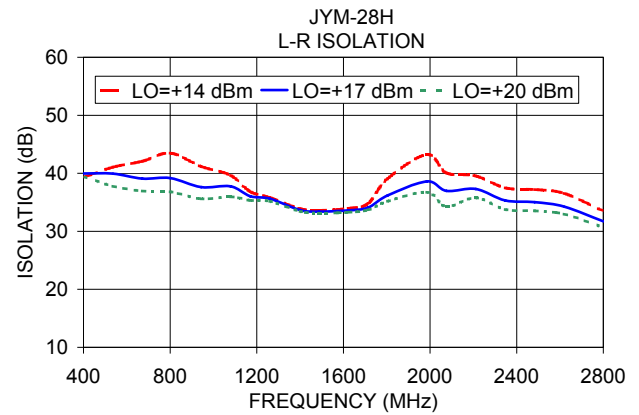
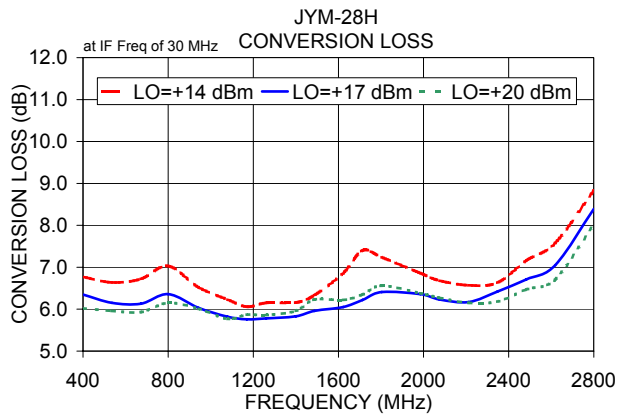
1 dB COMP.: +10 dBm typ.
m=mid band [2f_L to f_H/2]

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	1592.64	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





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.
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