

Surface Mount

Frequency Mixer

Level 17 (LO Power +17 dBm) 2 to 3000 MHz

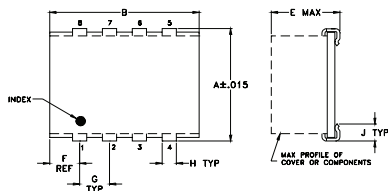
Maximum Ratings

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	

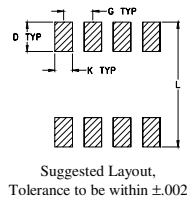
Pin Connections

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

Outline Drawing



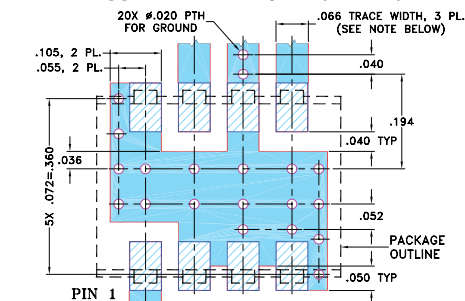
PCB Land Pattern



Outline Dimensions ($\frac{\text{inch}}{\text{mm}}$)

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)



NOTE: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS $0.030" \pm 0.002"$; COPPER: 1/2 OZ. EACH SIDE.
FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
 DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

5 COPPER LAND PATTERN FREE OF SOLDERMASK
P.O. Box 350166, Brooklyn, New York 1

15/16 MICROWAVE COMPONENTS

Features

- wide bandwidth, 2 to 3000 MHz
- good IP3, 24 dBm typ.
- high L-R isolation, 40 dB typ.

Applications

- cellular
- GPS
- satellite distribution
- MMDS

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)						IP3 at center band (dBm)
LO/Rf	IF	Mid-Band m			Total Range Max.	L		M		U		L		M		U		
		$\bar{X}$	σ	Max.		Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	
2-3000	4-1400	6.0	.20	8.9	10.6	40	30	40	25	30	25	40	35	30	20	22	15	24

1 dB COMP.: +10 dBm typ.

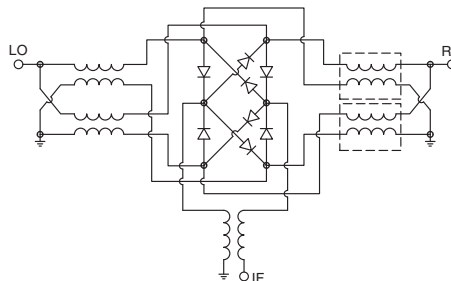
L = low range [f_L to $10 f_L$]
m = mid band [$2f_L$ to $f_H/2$]

M = mid range [$10 f_i$ to $f_i/2$] U = upper range [$f_i/2$ to f_i]

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
2.10	32.10	5.44	39.95	43.97	1.16	2.63
4.10	34.10	5.26	42.60	47.96	1.11	2.62
10.10	40.10	5.30	45.22	51.67	1.09	2.61
50.10	80.10	5.31	45.58	51.80	1.07	2.59
100.10	130.10	5.41	45.25	51.16	1.08	2.52
200.10	230.10	5.53	44.76	50.33	1.13	2.47
300.10	330.10	5.59	45.14	49.28	1.21	2.37
400.10	430.10	5.66	45.99	46.27	1.34	2.24
800.10	830.10	5.88	50.23	35.40	1.90	2.07
1000.10	1030.10	6.20	45.07	31.64	2.09	1.93
1200.10	1230.10	6.23	42.15	30.32	2.04	1.77
1500.10	1530.10	6.34	44.76	28.69	1.83	1.56
1800.10	1830.10	6.55	44.84	26.88	1.63	1.46
2000.10	2030.10	6.81	41.91	26.46	1.73	1.39
2200.10	2230.10	6.90	37.99	26.21	1.70	1.41
2400.10	2430.10	6.82	35.70	26.50	1.57	1.57
2500.10	2530.10	6.85	33.01	26.84	1.47	1.65
2600.10	2630.10	6.93	32.55	27.26	1.35	1.73
2800.10	2830.10	7.25	32.37	28.09	1.23	1.99
3000.10	3030.10	8.05	33.83	28.71	1.58	2.26

Electrical Schematic



For detailed performance specs
& shopping online see web site



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ISO 9001 ISO 14001 AS 9100 CERTIFIED

332-4661 The Design Engineers Search Engine 

REV. B
M102713
JYM-30H
EDR-1815
DJ/TD/CP/AM
130328
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CASE STYLE: BJ293

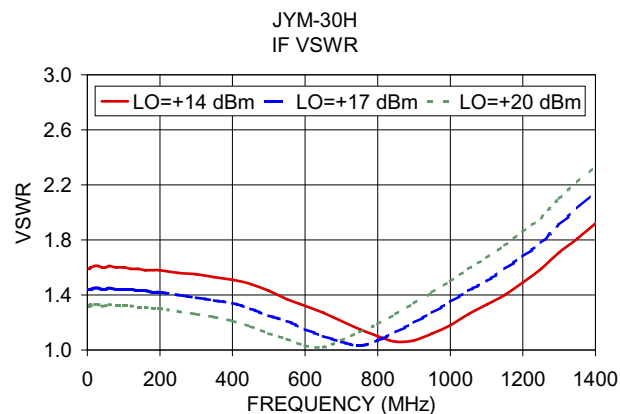
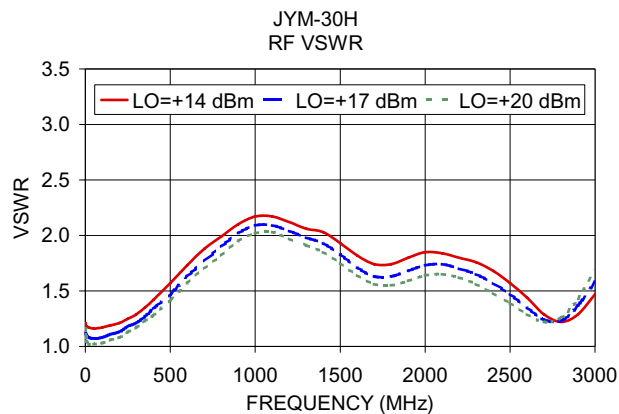
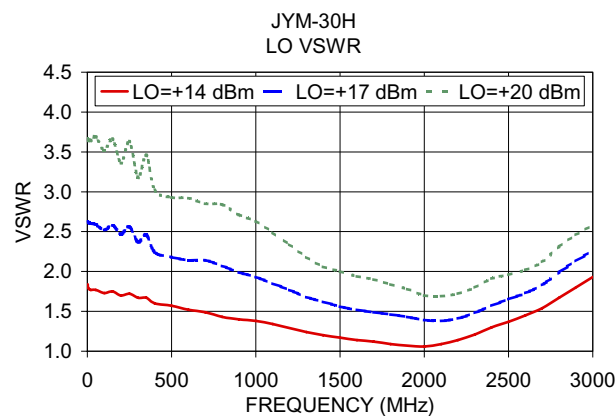
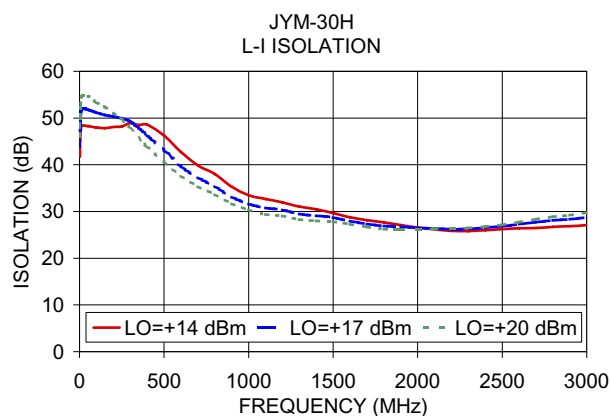
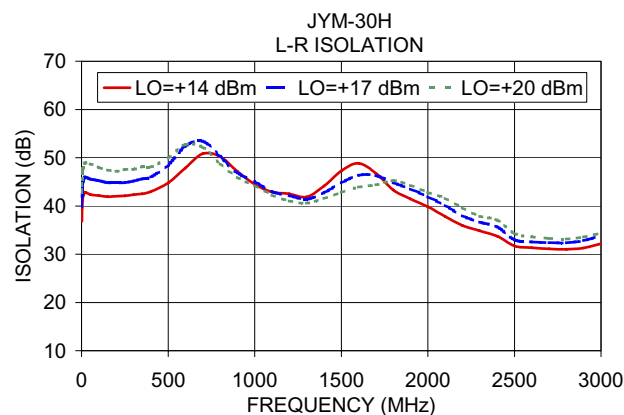
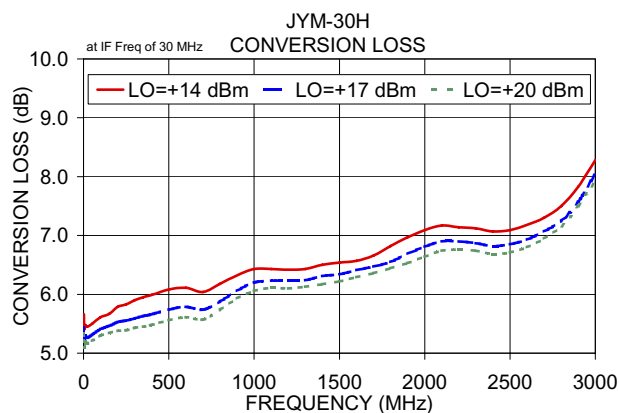
PRICE: \$23.95 ea. QTY (1-9)

+RoHS Compliant

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

Performance Charts

JYM-30H+ JYM-30H



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IF/RF MICROWAVE COMPONENTS

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For detailed performance specs
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