

Surface Mount Image Reject Mixer

Level 13 (LO Power +13dBm) 2490 to 2550 MHz

JCIR-25+
JCIR-25



CASE STYLE: BG291

PRICE: \$18.95 ea. QTY (10)

+ RoHS compliant in accordance
with EU Directive (2002/95/EC)

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

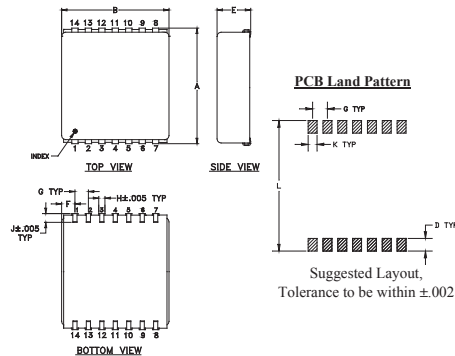
Features

- excellent image rejection, 27 dB typ.
- low conversion loss, 7.0 dB typ.
- aqueous washable
- J-leads for strain relief

Applications

- ISM

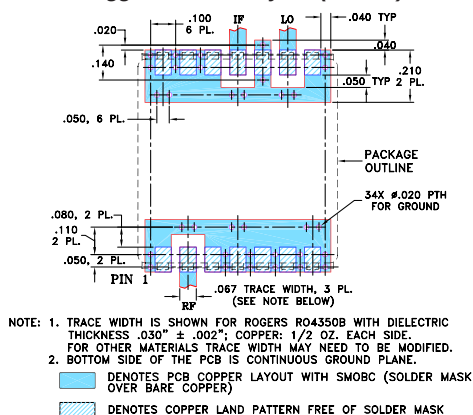
Outline Drawing



Outline Dimensions (inch)

A	B	C	D	E	F	G
.870	.800	--	.100	.250	.100	.100
22.10	20.32	--	2.54	6.35	2.54	2.54
H	J	K	L	wt		
.047	.065	.065	.890	grams		
1.19	1.65	1.65	22.61	4.0		

Demo Board MCL P/N: TB-367 Suggested PCB Layout (PL-212)



NOTE: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" ± .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.
3. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
4. DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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Electrical Specifications

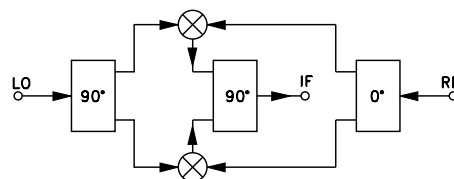
FREQUENCY (MHz)			CONVERSION LOSS (dB)		IMAGE REJECTION (dBc)			LO-RF ISOL. (dB)		LO-IF ISOL. (dB)		RF-IF ISOL. (dB)	IP3 at center band (dBm)
RF	LO	IF	$\overline{X}$	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Typ.	Typ.
2490-2550	2420-2480	57-83	7.0	8.5	LO>RF	27	17	35	25	26	18	25	16

1 dB COMPR.: +1 dBm typ.

Typical Performance Data

Frequency (MHz)		Conversion Loss (dB)	Image Rejection (dBc)	Isolation (dB)			VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO			L-R	L-I	R-I		
2490.00	2420.00	7.50	30.67	38.40	28.60	27.54	2.01	1.32
2495.00	2425.00	7.34	32.83	38.10	28.30	27.39	2.02	1.28
2497.00	2427.00	7.34	31.33	38.00	28.10	27.35	2.01	1.28
2500.00	2430.00	7.34	31.33	37.90	28.00	27.25	2.01	1.28
2505.00	2435.00	7.33	30.67	37.60	27.70	27.02	2.01	1.27
2510.00	2440.00	7.33	30.00	37.20	27.50	26.88	2.00	1.26
2515.00	2445.00	7.16	29.34	36.70	27.20	26.69	1.99	1.25
2520.00	2450.00	7.33	28.67	36.50	27.10	26.55	1.99	1.24
2523.00	2453.00	7.33	28.17	36.20	27.00	26.48	1.99	1.24
2525.00	2455.00	7.33	28.00	36.10	26.80	26.29	1.98	1.23
2527.00	2457.00	7.33	27.33	35.90	26.70	26.15	1.97	1.23
2530.00	2460.00	7.33	27.34	35.60	26.70	26.06	1.98	1.22
2533.00	2463.00	7.34	28.66	35.50	26.60	25.96	1.98	1.21
2535.00	2465.00	7.34	27.49	35.40	26.50	25.80	1.99	1.21
2537.00	2467.00	7.34	27.66	35.20	26.40	25.71	1.97	1.20
2540.00	2470.00	7.17	27.50	35.10	26.30	25.62	1.98	1.20
2543.00	2473.00	7.33	27.00	34.90	26.20	25.43	1.99	1.19
2545.00	2475.00	7.33	27.67	34.90	26.30	25.31	1.99	1.19
2547.00	2477.00	7.17	27.16	34.80	26.10	25.07	1.99	1.22
2550.00	2480.00	7.33	27.17	34.50	26.00	24.94	2.00	1.21

Electrical Schematic



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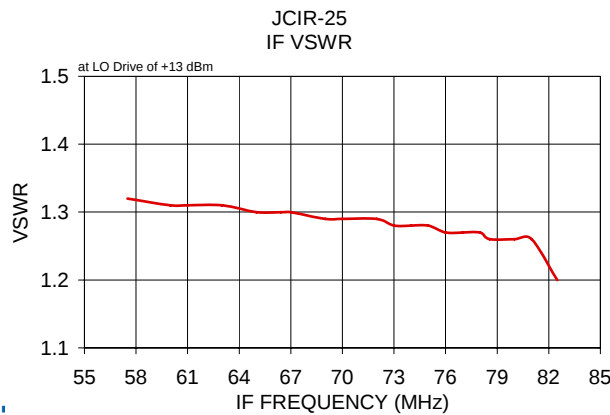
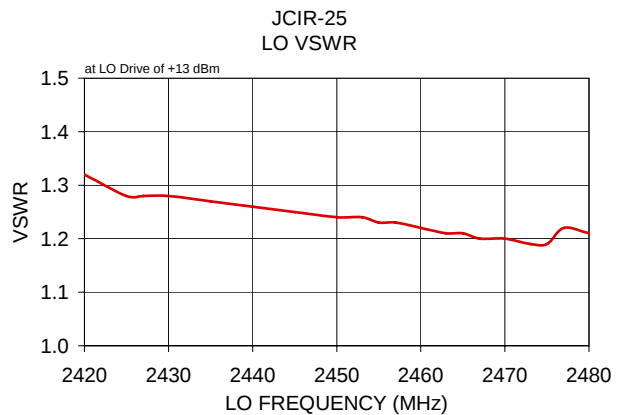
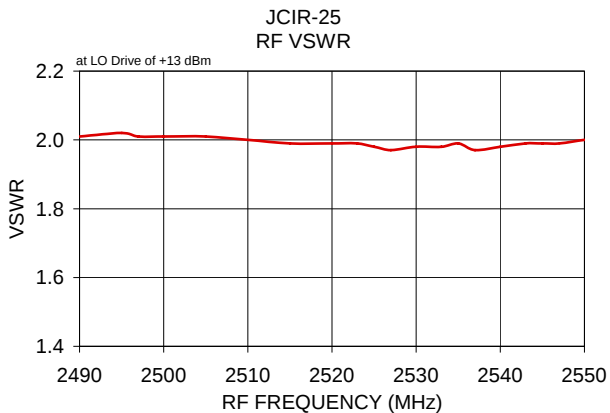
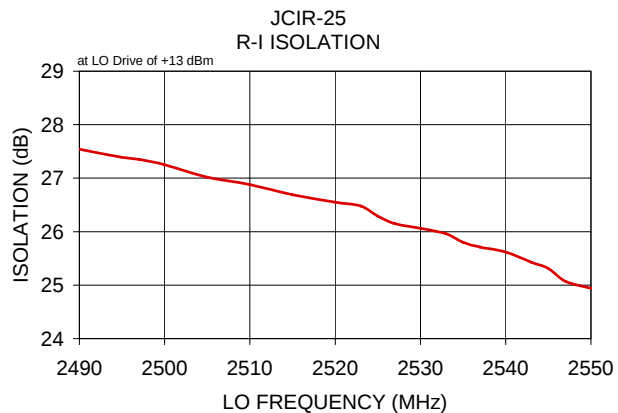
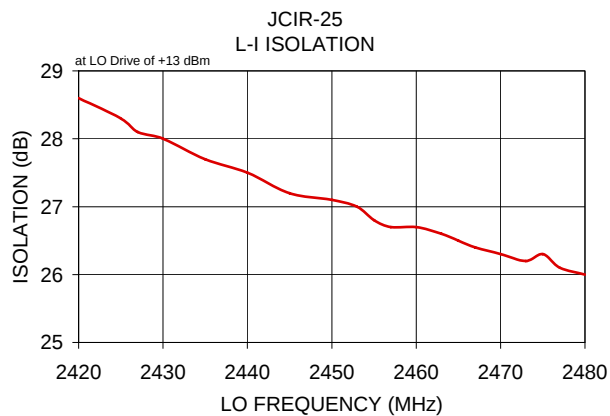
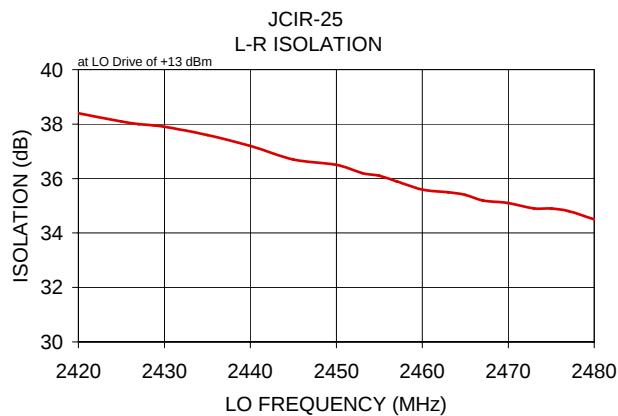
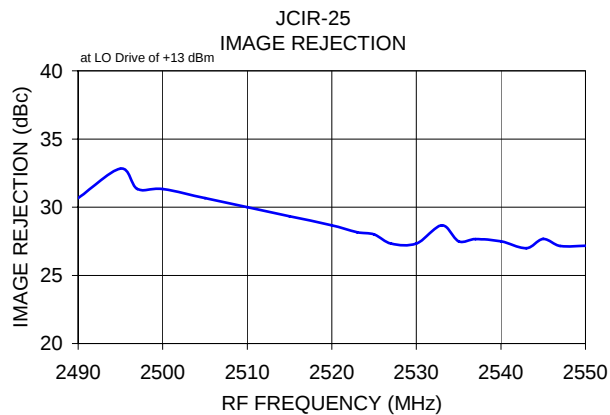
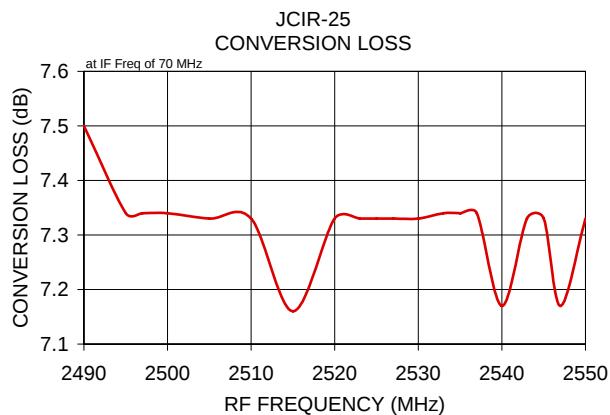
For detailed performance specs
& shopping online see web site

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Performance Charts

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