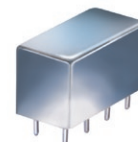


Plug-In

Frequency Mixer

Level 23 (LO Power +23 dBm) 0.01 to 100 MHz

RAY-6U+
RAY-6U



CASE STYLE: A01

PRICE: \$51.20 ea. QTY (1-9)

Maximum Ratings

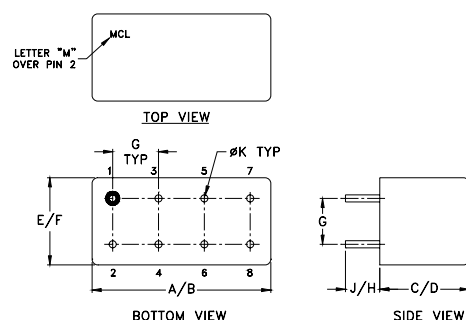
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	350mW
IF Current	40mA
Permanent damage may occur if any of these limits are exceeded.	

Pin Connections

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

^pins must be connected together externally

Outline Drawing



Outline Dimensions (inch mm)

A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	

Features

- excellent conversion loss, 5.09 dB typ.
- high L-R isolation, 50 dB typ., L-I isolation, 40 dB typ.
- rugged welded construction
- hermetically sealed

Applications

- VHF
- defense & federal communications
- aviation
- radio astronomy

+ 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.

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF	IF	Mid-Band		Total		L	M	U				L	M	U			
$f_L - f_U$		$\bar{X}$	σ	Max.	Range Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.01-100	DC-100	5.09	0.15	7.0	8.0	60	50	50	40	40	30	50	45	40	30	35	25

1 dB COMP.: +15 dBm typ.

L = low range [f_L to $10 f_L$]

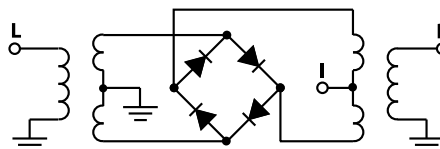
M = mid range [$10 f_L$ to $f_U/2$]

U = upper range [$f_U/2$ to f_U]

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 +23dBm	LO +23dBm	LO +23dBm	LO +23dBm	LO +23dBm
0.01	30.01	5.66	79.86	76.26	1.35	1.70
0.02	30.02	5.33	80.63	63.63	1.35	1.66
0.05	30.05	5.17	79.19	61.75	1.35	1.61
0.10	30.10	5.22	79.45	61.54	1.35	1.61
0.20	30.20	5.20	79.24	61.54	1.34	1.67
0.50	30.50	5.22	78.84	61.56	1.33	1.65
1.00	31.00	5.23	78.29	61.49	1.31	1.61
2.00	32.00	5.24	77.60	61.76	1.31	1.60
5.00	35.00	5.35	74.22	62.90	1.30	1.59
10.00	40.00	5.47	69.60	65.50	1.30	1.60
14.29	44.29	5.37	66.38	67.38	1.29	1.62
20.00	50.00	4.94	64.53	61.45	1.29	1.63
25.01	55.01	4.84	63.21	57.36	1.29	1.67
32.15	62.15	5.21	61.72	52.92	1.30	1.69
39.29	69.29	5.52	56.11	49.37	1.31	1.69
50.00	80.00	5.59	62.58	46.14	1.34	1.71
60.72	90.72	5.60	49.27	45.21	1.37	1.73
75.00	45.00	5.80	42.49	40.86	1.41	1.77
85.72	55.72	6.04	43.68	38.59	1.43	1.78
100.00	70.00	6.29	46.53	37.83	1.45	1.77

Electrical Schematic



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IF/RF MICROWAVE COMPONENTS

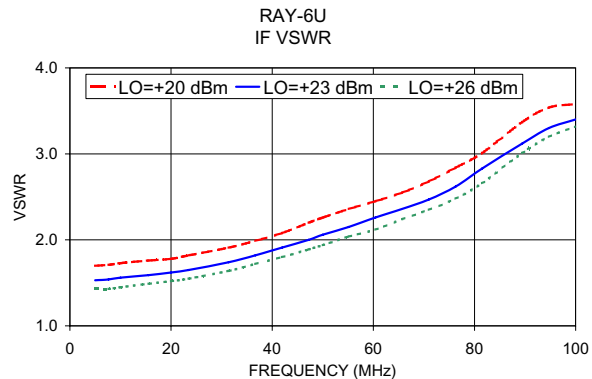
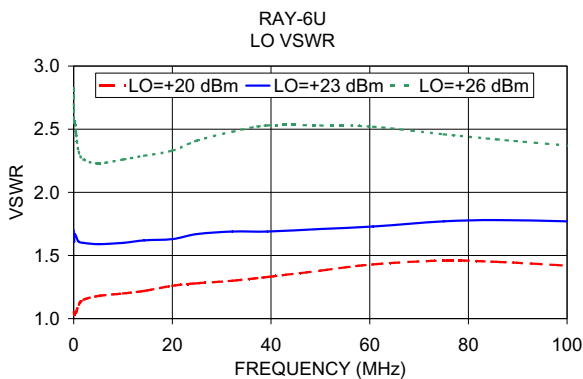
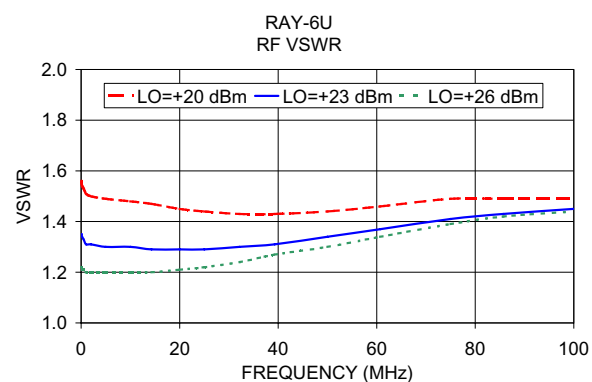
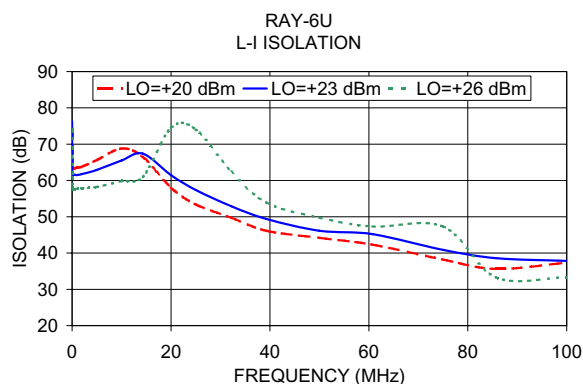
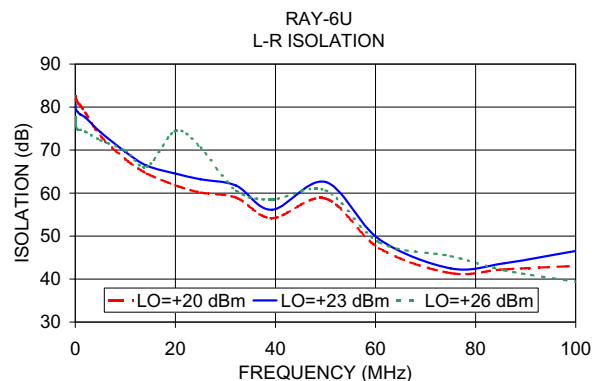
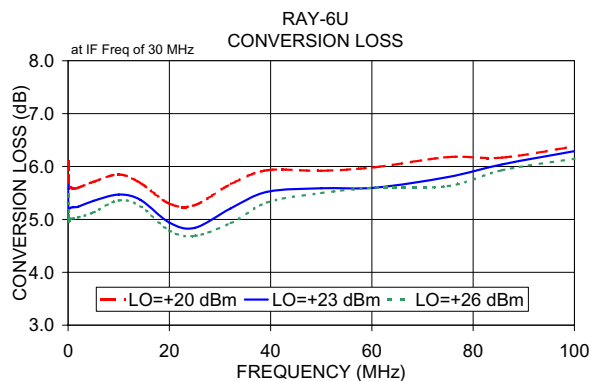
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Performance Charts

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