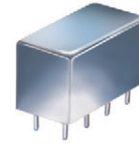


Frequency Mixer

Level 23 (LO Power +23 dBm) 0.07 to 200 MHz

RAY-3+



CASE STYLE: A01

PRICE: \$45.20 ea. QTY (1-9)

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

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

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

Features

- excellent conversion loss, 5.53 dB typ.
- high isolation 40 dB typ. L-R & L-I
- rugged welded construction
- hermetically sealed

Applications

- VHF
- defense & federal communications
- aviation & maritime communications

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.
0.07-200	DC-200	5.53	0.08	7.5	8.0	55	45	40	30	30	25	55	45	40	30	30	20

1 dB COMP: +15 dBm typ.

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

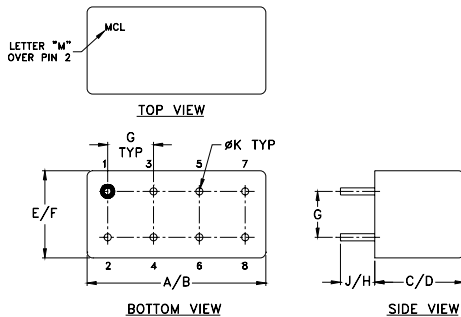
M = mid range [$10 f_L$ to $f_U/2$]

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
0.07	30.07	5.77	55.55	56.68	1.17	2.42
0.20	30.20	5.58	53.15	57.09	1.18	2.40
1.00	31.00	5.29	52.74	57.07	1.18	2.23
5.00	35.00	5.23	52.57	56.88	1.17	2.21
20.00	50.00	5.27	52.28	56.59	1.17	2.19
34.54	64.54	5.24	51.27	54.69	1.16	2.20
48.33	78.33	5.26	48.91	51.06	1.15	2.20
62.12	92.12	5.28	46.28	47.85	1.15	2.27
69.01	99.01	5.29	44.38	45.65	1.14	2.27
82.80	52.80	5.28	42.67	43.88	1.13	2.28
96.59	66.59	5.28	41.29	41.90	1.13	2.25
103.48	73.48	5.25	39.95	40.89	1.13	2.14
117.27	87.27	5.28	39.22	39.90	1.12	2.10
131.06	101.06	5.29	39.37	39.78	1.12	2.17
144.85	114.85	5.34	38.04	37.10	1.12	2.25
158.63	128.63	5.43	36.70	33.79	1.12	2.29
165.53	135.53	5.47	36.49	31.41	1.13	2.22
179.32	149.32	5.47	36.22	30.50	1.14	2.16
193.10	163.10	5.54	36.47	29.43	1.16	2.18
200.00	170.00	5.51	36.43	29.00	1.16	2.21

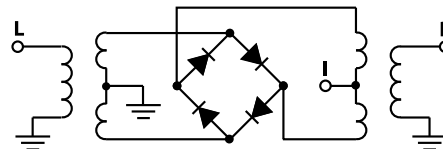
Outline Drawing



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	

Electrical Schematic



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ISO 9001 ISO 14001 AS 9100 CERTIFIED

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IF/RF MICROWAVE COMPONENTS

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