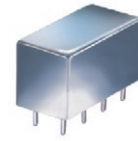


Frequency Mixer

Level 23 (LO Power +23 dBm) 100 to 2500 MHz

RAY-11+



CASE STYLE: A01

PRICE: \$79.45 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	1
RF	8
IF	3
GROUND	2,5,6,7
CASE GROUND	2,5,6,7
DO NOT USE	4

Features

- excellent conversion loss, 6.23 dB typ.
- very wideband, 100 to 2500 MHz
- rugged welded construction
- hermetically sealed

Applications

- wireless communication
- GPS
- ISM/PCS/UMTS
- satellite distribution

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.
100-2500	DC-500	6.23	0.21	9.0	9.0	35	25	32	25	32	25	14	10	20	10	20	10

1 dB COMP.: +15 dBm typ.

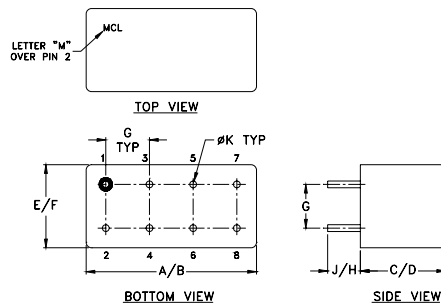
L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]

m = mid band [$2f_L$ to $f_U/2$]

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 +23dBm	LO +23dBm	LO +23dBm	LO +23dBm	LO +23dBm
100.00	130.00	6.80	57.63	42.09	2.26	2.35
200.00	230.00	6.92	51.54	42.54	2.58	2.14
332.26	362.26	6.89	47.39	38.02	2.84	2.00
500.00	530.00	6.39	47.64	31.79	3.10	1.64
564.52	534.52	6.40	47.27	29.16	2.98	1.59
796.77	766.77	7.84	48.68	25.70	2.58	1.47
1000.00	970.00	7.12	43.65	20.91	2.08	2.39
1029.03	999.03	7.09	42.35	20.20	2.15	2.24
1200.00	1170.00	6.60	40.57	18.33	2.39	2.37
1250.00	1220.00	6.54	40.50	18.94	2.33	2.92
1261.29	1231.29	6.61	40.48	19.06	2.59	2.98
1416.13	1386.13	8.12	40.54	19.84	3.18	2.70
1570.97	1540.97	8.52	38.53	21.16	3.66	1.85
1803.23	1773.23	7.98	37.48	23.58	2.29	1.34
2000.00	1970.00	7.79	36.62	26.62	2.04	1.47
2035.43	2005.48	7.71	36.57	27.20	2.18	1.60
2200.00	2170.00	7.86	36.32	28.35	2.83	2.41
2345.16	2315.16	7.50	36.12	26.61	2.85	2.63
2472.58	2392.58	7.31	36.72	25.92	2.74	2.75
2500.00	2470.00	7.10	38.10	26.17	2.29	2.90

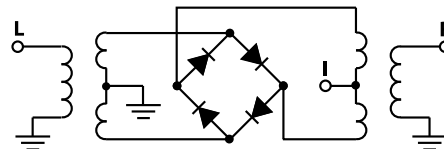
Outline Drawing



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



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

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IF/RF MICROWAVE COMPONENTS

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