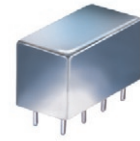


Plug-In

Frequency Mixer

RAY-11

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



CASE STYLE: A01

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

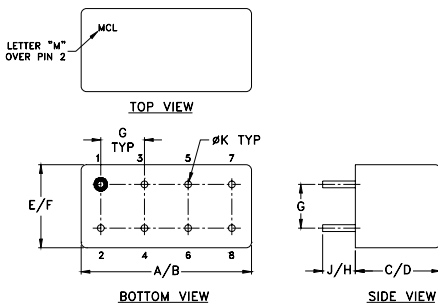
Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF f_L - f_U	IF	Mid-Band m		Total Range Max.	9.0	L		M		U		L		M		U	
		\bar{X}	σ			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 $f_U/2$]

Outline Drawing



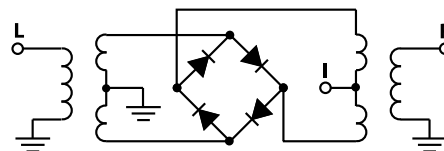
Outline Dimensions (inch/mm)

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	

Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
100.00	6.80	57.63	42.09	2.26	2.35
200.00	6.92	51.54	42.54	2.58	2.14
332.26	6.89	47.39	38.02	2.84	2.00
500.00	6.39	47.64	31.79	3.10	1.64
564.52	6.40	47.27	29.16	2.98	1.59
796.77	7.84	48.68	25.70	2.58	1.47
1000.00	7.12	43.65	20.91	2.08	2.39
1029.03	7.09	42.35	20.20	2.15	2.24
1200.00	6.60	40.57	18.33	2.39	2.37
1250.00	6.54	40.50	18.94	2.33	2.92
1261.29	6.61	40.48	19.06	2.59	2.98
1416.13	8.12	40.54	19.84	3.18	2.70
1570.97	8.52	38.53	21.16	3.66	1.85
1803.23	7.98	37.48	23.58	2.29	1.34
2000.00	7.79	36.62	26.62	2.04	1.47
2035.43	7.71	36.57	27.20	2.18	1.60
2200.00	7.86	36.32	28.35	2.83	2.41
2345.16	7.50	36.12	26.61	2.85	2.63
2472.58	7.31	36.72	25.92	2.74	2.75
2500.00	7.10	38.10	26.17	2.29	2.90

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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