

Plug-In Phase Detector

50Ω High Output 5 to 150 MHz

Maximum Ratings

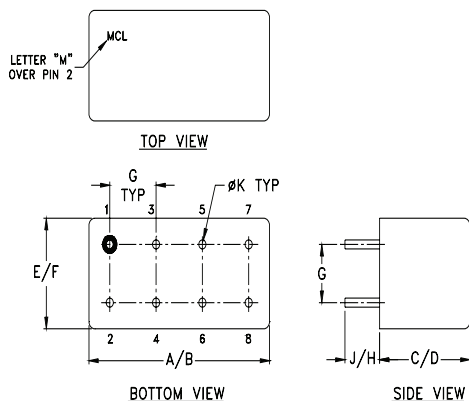
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Input Power	50mW
Peak IF current	20mA

Permanent damage may occur if any of these limits are exceeded.

Pin Connections

RF REF (RF2)	8
RF IN (RF1)	1
DC OUT (I)	3,4
GROUND	2,5,6,7
CASE GROUND	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

Features

- wideband, 5 to 150 MHz
- hermetic case
- low DC offset, 0.3 mV typ.
- high DC output, 1000 mV typ.

Applications

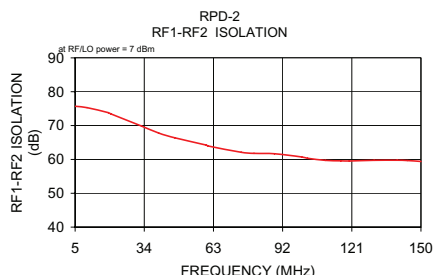
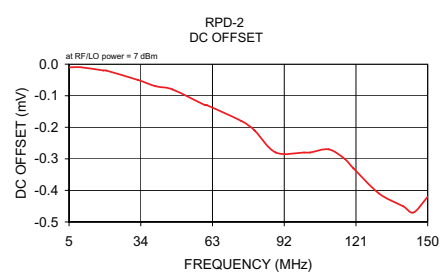
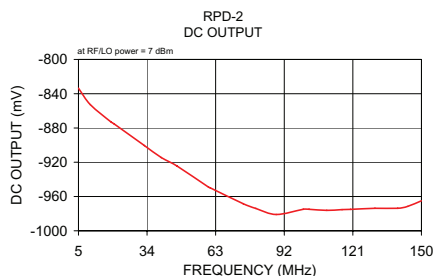
- monitoring circuits
- leveling circuits
- PLL

Phase Detector Electrical Specifications

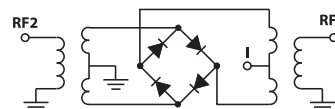
FREQUENCY (MHz)	POWER IN	SCALE FACTOR	IMPEDANCE (ohms)	ISOLATION (dB)	OUTPUT POLARITY	DC OUTPUT (mV)	FIGURE OF MERIT
RF1	RF1					Max. Offset	
RF2	RF2					Typ. Min. Typ. Max.	Typ.
5-150	DC-50	7	8	500	40	neg.	1000 700 0.3 1 143

Typical Performance Data

Frequency (MHz)	DC Output mV	DC Offset mV	RF1-RF2 Isolation (dB)
	$\bar{X}$ σ	$\bar{X}$ σ	$\bar{X}$
5.00	-833.63 2.72	-0.01 0.26	75.70
10.00	-852.76 1.95	-0.01 0.27	75.30
18.93	-873.33 1.77	-0.02 0.26	73.81
20.00	-875.10 1.78	-0.02 0.26	73.45
32.86	-900.53 2.55	-0.05 0.24	69.84
40.00	-914.52 3.03	-0.07 0.24	67.79
46.79	-924.59 3.49	-0.08 0.23	66.39
60.00	-949.07 4.67	-0.13 0.23	64.23
60.71	-949.90 4.72	-0.13 0.23	63.98
74.64	-968.41 6.47	-0.18 0.22	62.11
80.00	-973.90 7.19	-0.21 0.22	61.80
88.57	-981.00 8.49	-0.28 0.23	61.68
100.00	-974.94 9.96	-0.28 0.26	60.73
102.50	-974.94 10.38	-0.28 0.27	60.33
110.00	-976.18 11.49	-0.27 0.25	59.71
116.43	-975.23 12.62	-0.30 0.23	59.57
120.00	-975.00 13.37	-0.33 0.22	59.53
130.36	-973.76 16.20	-0.41 0.19	59.73
140.00	-973.73 19.18	-0.45 0.22	59.76
144.29	-971.46 20.99	-0.47 0.25	59.67
150.00	-964.95 23.54	-0.42 0.33	59.40



electrical schematic



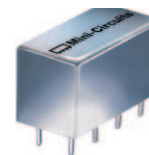
Notes

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RPD-2+
RPD-2



CASE STYLE: A01
PRICE: \$23.20 ea. QTY (1-9)

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

REV. A
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