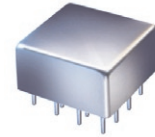


Plug-In I&Q Demodulator

MIQC-60WD+

50Ω

20 to 60 MHz



Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
LO/RF Power	50mW
I&Q Current	40mA

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

Pin Connections

LO (carrier)	13
RF (signal)	1
I (0°)(ref.)	8
Q (90°)*	5
GROUND	2,3,4,6,7,9,10,11,12,14,15,16
CASE GROUND	2,3,4,6,7,9,10,11,12,14,15,16

*Q= I +90° for LO<RF
Q= I -90° for LO>RF

Features

- hermetically sealed metal case
- excellent 3rd and 5th order harmonic suppression
- good amplitude and phase unbalance

Applications

- radar and communication systems
- military, hi-rel applications

CASE STYLE: C07
PRICE: \$84.45 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.

Demodulator Electrical Specifications

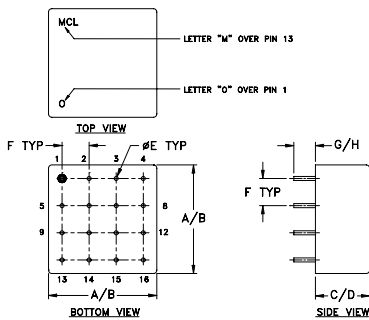
MODEL NO.	FREQUENCY (MHz)				CONVERSION LOSS (dB)			AMPLITUDE UNBALANCE (dB)		PHASE UNBALANCE (Deg.)		HARMONIC SUPPRESSION (dBc)			
	RF (SIGNAL)		LO (CARRIER)		I&Q				with reference to 90°		3XI/Q		5XI/Q		
	f _L	f _U	Min.	Max.	\bar{x}	σ	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.
MIQC-60WD+	20	60	DC	5	5.3	0.10	7.0	0.15	0.6	1.0	5.0	55	45	67	55

Note:
1. Operating LO Power: 10±0.5 dBm
2. 1 dB Compression at +4 dBm RF input
3. DC offset 1mV typ.
4. Conversion Loss=RF power, dBm - (I+Q) power, dBm

Typical Performance Data

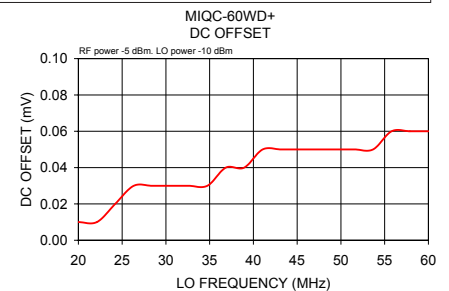
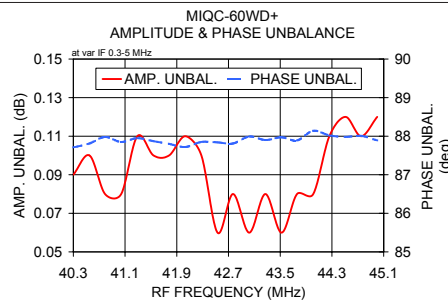
Frequency (MHz)	Conversion Loss (dB)	Amplitude Unbalance (dB)	Phase (I&Q) (deg.)	Frequency (MHz)		DC Offset (mV)
				LO	RF	
40.30	0.30	5.28	87.71	20.00	20.10	0.01
40.55	0.55	5.25	87.81	22.11	22.21	0.01
40.79	0.79	5.23	87.98	24.21	24.31	0.02
41.04	1.04	5.23	87.85	26.32	26.42	0.03
41.29	1.29	5.22	87.95	28.42	28.52	0.03
41.54	1.54	5.22	87.87	30.53	30.63	0.03
41.78	1.78	5.23	87.80	32.63	32.73	0.03
42.03	2.03	5.30	87.72	34.74	34.84	0.03
42.28	2.28	5.28	87.85	36.84	36.94	0.04
42.53	2.53	5.28	87.84	38.95	39.05	0.04
42.77	2.77	5.30	87.81	41.05	41.15	0.05
43.02	3.02	5.30	87.99	43.16	43.26	0.05
43.27	3.27	5.29	87.90	45.26	45.36	0.05
43.52	3.52	5.29	87.97	47.37	47.47	0.05
43.76	3.76	5.29	87.89	49.47	49.57	0.05
44.01	4.01	5.28	88.14	51.58	51.68	0.05
44.26	4.26	5.28	88.02	53.68	53.78	0.05
44.51	4.51	5.28	87.98	55.79	55.89	0.06
44.75	4.75	5.26	88.01	57.89	57.99	0.06
45.00	5.00	5.27	87.89	60.00	60.10	0.06

Outline Drawing

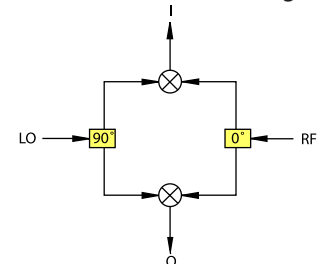


Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	wt
.770	.810	.380	.410	.030	.200	.20	.14	grams
19.56	20.57	9.65	10.41	0.76	5.08	5.08	3.56	11.0



I&Q demodulation block diagram



For detailed performance specs & shopping online see web site

Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

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