

Coaxial I&Q Demodulator

ZAMIQ-895D

50Ω

868 to 895 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.

Coaxial Connections

LO (carrier)	1
RF (signal)	3
I (0°)(ref.)	4
Q (90°)*	2

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

Features

- rugged, shielded case
- excellent 3rd and 5th order harmonic suppression
- good phase and amplitude unbalance

Applications

- cellular
- communication systems



CASE STYLE: HHH141

Connectors	Model	Price	Qty.
SMA	ZAMIQ-895D	\$149.95	(1-9)

Demodulator Electrical Specifications

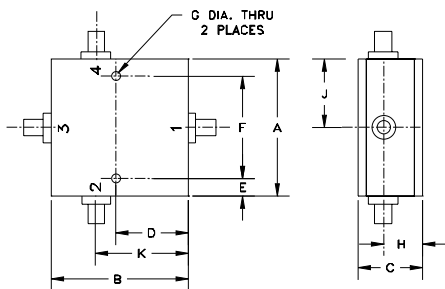
MODEL NO.	FREQUENCY (MHz)				CONVERSION LOSS (dB)			AMPLITUDE UNBALANCE (dB)		PHASE UNBALANCE (Deg.)		HARMONIC SUPPRESSION (dBc)			
	RF (SIGNAL)		LO (CARRIER)		I&Q	̄	σ	Max.	Typ.	Max.	with reference to 90°		3XI/Q		5XI/Q
fL	fU	Min.	Max.	Typ.							Max.	Typ.	Max.	Typ.	Min.
ZAMIQ-895D	868	895	DC	5	8.0	0.20	10.5	0.15	0.3	1.5	4.0	52	35	58	50

Notes:
 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

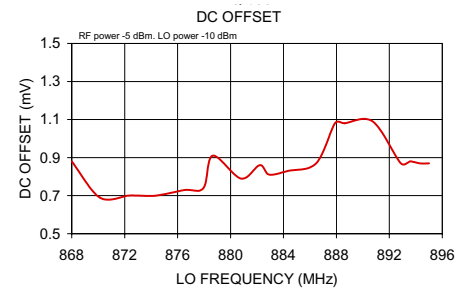
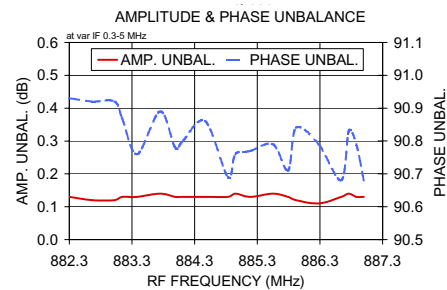
Frequency (MHz)	Conversion Loss (dB)		Amplitude Unbalance (dB)	Phase (I&Q) (deg.)	Frequency (MHz)		DC Offset (mV)
	LO	RF			LO	RF	
882.30	0.30	8.79	0.13	90.93	868.00	868.10	0.88
882.66	0.65	8.78	0.12	90.92	870.13	870.23	0.69
883.02	1.03	8.77	0.12	90.92	872.26	872.36	0.70
883.14	1.15	8.77	0.13	90.87	872.97	873.07	0.70
883.38	1.38	8.76	0.13	90.76	874.39	874.50	0.70
883.75	1.76	8.75	0.14	90.89	876.53	876.63	0.73
883.99	1.99	8.74	0.13	90.78	877.95	878.05	0.74
884.11	2.11	8.73	0.13	90.80	878.66	878.76	0.91
884.47	2.46	8.71	0.13	90.86	880.79	880.89	0.79
884.83	2.84	8.70	0.13	90.69	882.21	882.31	0.86
884.95	2.96	8.69	0.14	90.76	882.92	883.02	0.81
885.19	3.19	8.68	0.13	90.77	884.34	884.44	0.83
885.55	3.54	8.65	0.14	90.79	886.47	886.57	0.87
885.79	3.80	8.63	0.13	90.71	887.89	888.00	1.08
885.92	3.92	8.62	0.12	90.84	888.61	888.71	1.08
886.28	4.27	8.60	0.11	90.79	890.74	890.84	1.09
886.64	4.65	8.59	0.13	90.68	892.87	892.97	0.87
886.76	4.76	8.60	0.14	90.83	893.58	893.68	0.88
886.88	4.88	8.60	0.13	90.79	894.29	894.39	0.87
887.00	5.00	8.59	0.13	90.68	895.00	895.10	0.87

Outline Drawing

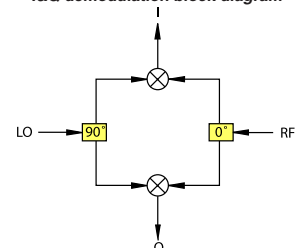


Outline Dimensions (inch/mm)

A	B	C	D	E	F	
2.00	2.00	.95	1.062	.125	1.75	
50.80	50.80	24.13	26.97	3.18	44.45	
G	H	J	K	wt		
.125	.575	1.00	1.35	grams		
3.18	14.61	25.40	34.29	200		



I&Q demodulation block diagram



For detailed performance specs & shopping online see web site

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