Gooch & Housego
ENABLING PHOTONIC TECHNOLOGIES

Document
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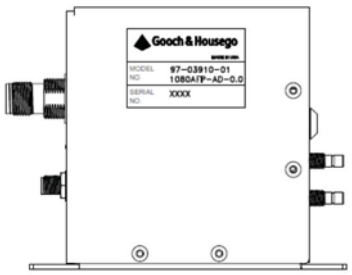
Control

97-03910-XX Driver Specifications

40-149MHz, 0-3W RF Power, Internal Clock



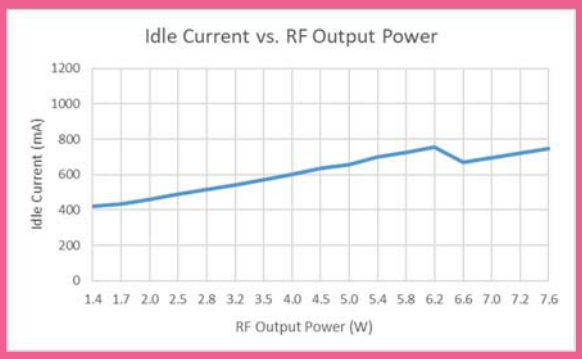
Specifications

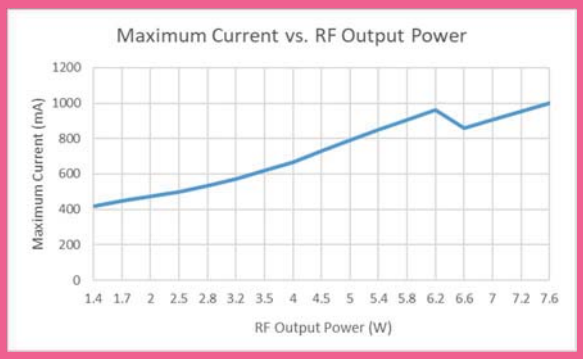
Parameter	Performance
Center frequency (Fc)	See Table A
RF output power	See Table A
RF output power stability	+/- 5% over heat sink temperature range
Input voltage +Vcc	24VDC +/- 0.2V
Supply Current	See Table B
2nd harmonic level	< -20dBc
Output VSWR	1.5:1 max; 50 Ohms
Output waveform	Sinusoidal
Rise / Fall time	4 nsec typ., 8 nsec max (freq. ≥ 200 MHz)
Contrast ratio	50 dB min
Analog input voltage	0 – 1 V
Analog input impedance	50 Ohms
Digital input voltage	TTL (5V) or LVTTL (3.3V) (VIH = 2.0V, VIL = 0.8V)
Digital input impedance	10k Ohms
Frequency stability	+/- 1.5 ppm over temp
Frequency accuracy	+/- 1.5 ppm
Jitter	0.3 psec typ.
Phase Noise	-105 dBc/Hz at 10kHz offset
Thermal management	Conduction cooled
Operating temperature range	+10°C to +60°C (referenced to mounting tab)

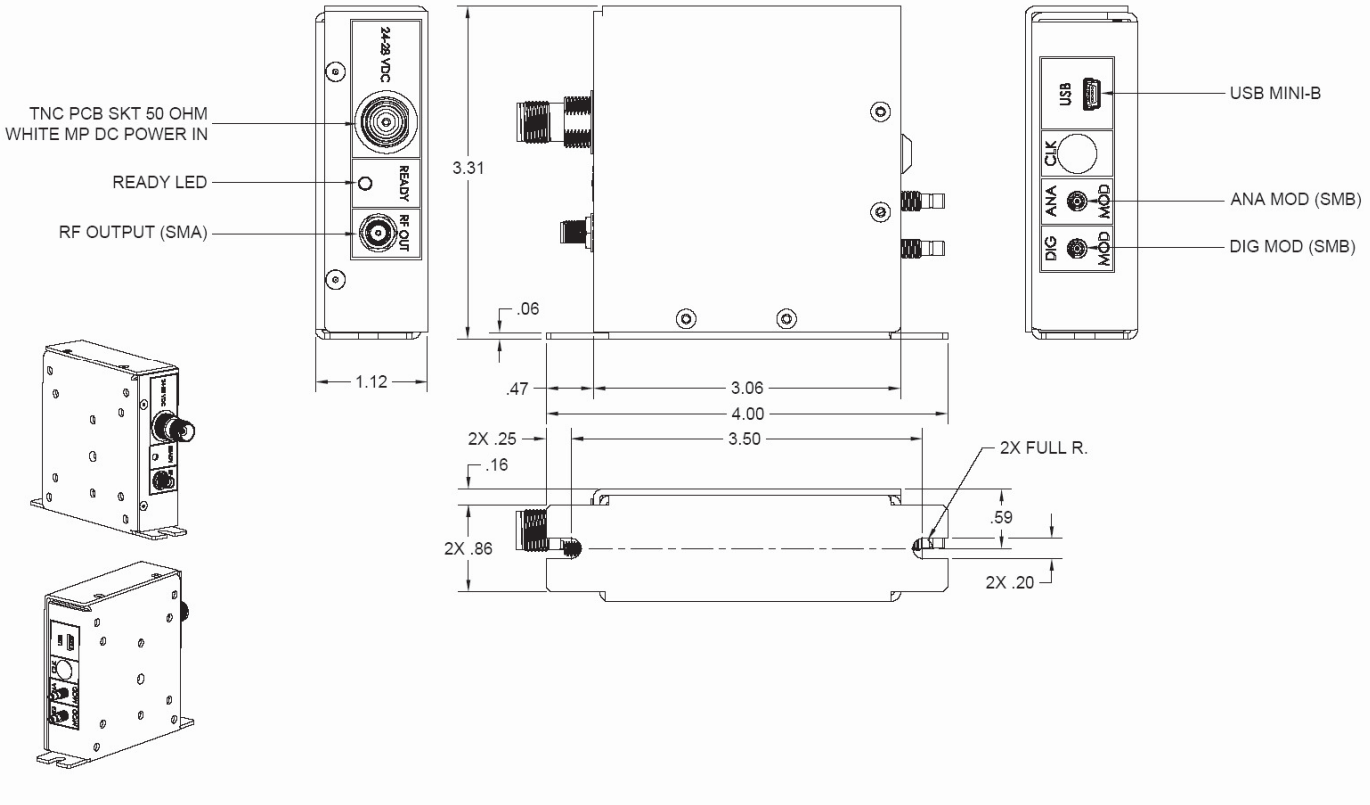
Table A

Part Number	Freq Center (MHz)	Modulation	RF Power (Watts)	Model
97-03910-01	80	Combined	0	1080AFP-AD-0.0
97-03910-02	40	Combined	0.4	1040AFP-AD-0.4
97-03910-03	80	Combined	1	1080AFP-AD-1.0
97-03910-04	40	Analog	0.5	1040AFP-A-0.5
97-03910-05	80	Analog	2.5	1080AFP-A-2.5
97-03910-06	80	Analog	1	1080AFP-A-1.0
97-03910-07	80	Combined	2.5	1080AFP-AD-2.5
97-03910-08	80	Digital	1	1080AFP-D-1.0
97-03910-09	80	Digital	2	1080AFP-D-2.0
97-03910-10	80	Digital	2.5	1080AFP-D-2.5
97-03910-11	80	Combined	2	1080AFP-AD-2.0
97-03910-12	79	Analog	1	1079AFP-A-1.0
97-03910-13	80	Analog	1.5	1080AFP-A-1.5
97-03910-14	80	Combined	1.5	1080AFP-AD-1.5
97-03910-15	85	Combined	1	1085AFP-AD-1.0

Table B


Idle Current vs. RF Output Power
Idle Current (mA)
1200
1000
800
600
400
200
0
1.4 1.7 2.0 2.5 2.8 3.2 3.5 4.0 4.5 5.0 5.4 5.8 6.2 6.6 7.0 7.2 7.6
RF Output Power (W)


Maximum Current vs. RF Output Power
Maximum Current (mA)
1200
1000
800
600
400
200
0
1.4 1.7 2 2.5 2.8 3.2 3.5 4 4.5 5 5.4 5.8 6.2 6.6 7 7.2 7.6
RF Output Power (W)


TNC PCB SKT 50 OHM
WHITE MP DC POWER IN
READY LED
RF OUTPUT (SMA)
24-28 VDC
READY
RF OUT
1.12
3.31
.06
.47
3.06
4.00
2X .25
3.50
.16
2X .86
2X FULL R.
.59
2X .20
USB
CLK
ANA
DIG
MOD
MOD
USB MINI-B
ANA MOD (SMB)
DIG MOD (SMB)