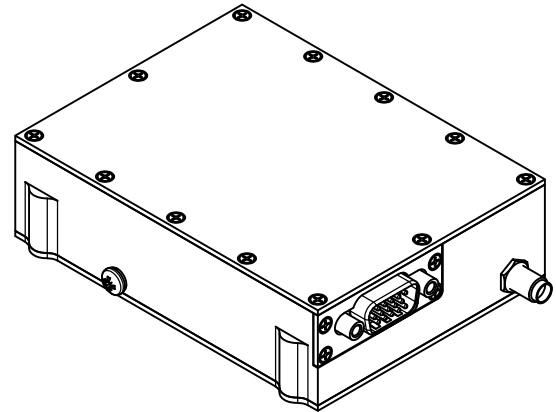
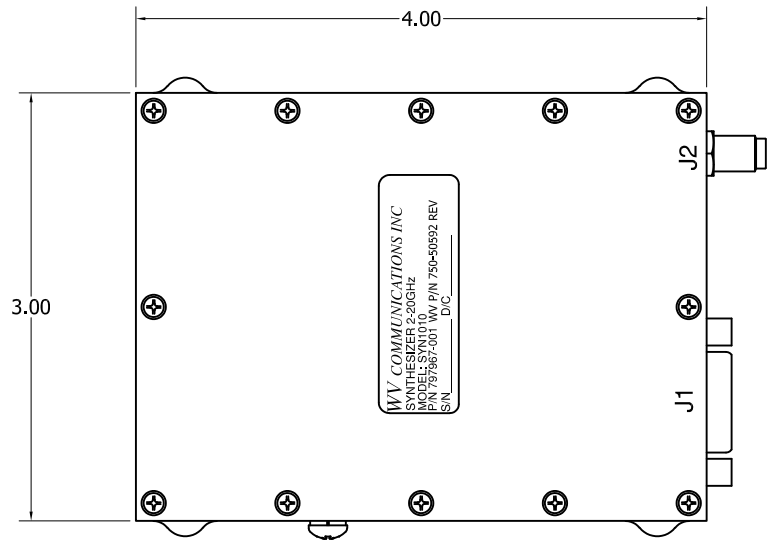
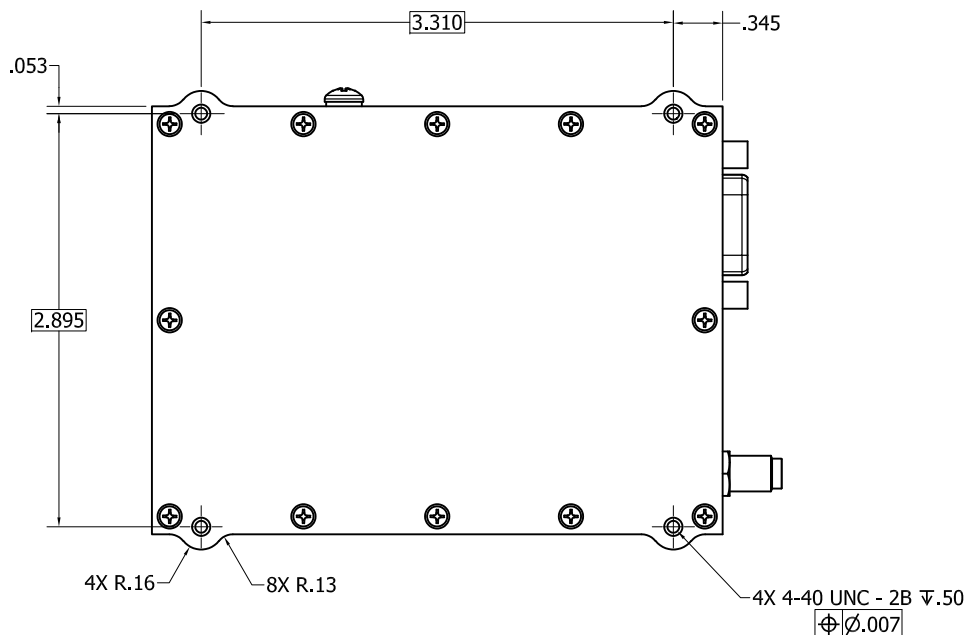
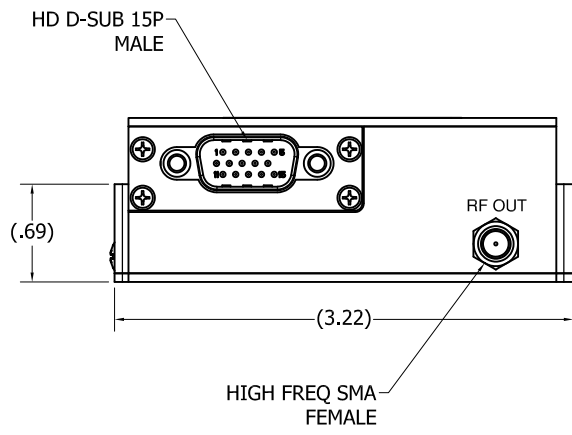
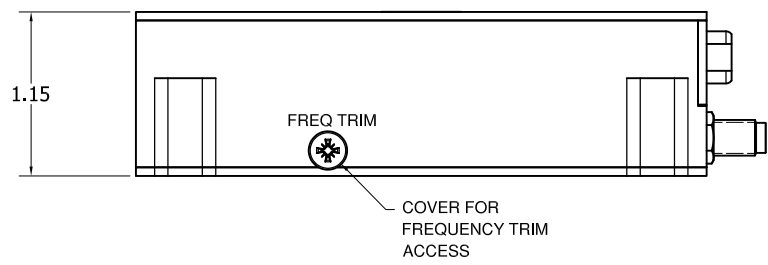


**** PROPRIETARY DATA ****
 THIS DOCUMENT CONTAINS DATA WHICH IS PROPRIETARY OR CONFIDENTIAL TO WV COMM (WV COMMUNICATIONS INCORPORATED). THIS DOCUMENT AND THE DATA CONTAINED HEREIN SHALL NOT BE USED, DUPLICATED, OR ALTERED WITHOUT THE EXPRESSED WRITTEN CONSENT OF WV COMM. ALL RIGHTS ARE RESERVED.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	RELEASED	11/17/2016	TT
	B	REDRAWN TO D SIZE ADDED MARKING LABEL	3/14/17	TT/UY



- Output Frequency Range:** 2-20GHz
- RF Output Power:** +14dBm Minimum & +19dBm Maximum
- RF Frequency Accuracy:** ±100kHz Maximum
- RF Frequency Load/Supply:** No frequency pulling or pushing
- Phase Noise**
 - 50dBc/Hz Maximum @ 1kHz
 - 60dBc/Hz Maximum @ 10kHz
 - 70dBc/Hz Maximum @ >100kHz
- Tuning (switching) Speed** 5-8µSec to within ±1MHz (includes setup time and RF settling time)
- Frequency Step size:** 1MHz Nominal
- Frequency Sweep (Chirp)**
 - Maximum Rate of Change 50MHz/µSec
 - Number of Frequency Steps 20 to 128
 - Chirp Direction Up / Down
- Spurious:** -60dBc Minimum
- Harmonics/Subharmonics:** -30dBc Minimum
- Output Pulse Modulation:** PRI - 2.0 – 65535µSec, CW
- External TTL gate Pulse):** PW - 0.2 – 9999µSec
- Rise/Fall Time:** 30nSec Maximum between 10% and 90% points
- RF On/Off Isolation:** 60dB Minimum
- Control:** Serial TBD Format
- Temperature Range:** -40°C to +85°C
- Warm Up time:**
 - 40°C to -10°C 10 Minutes Maximum
 - 10°C to +85°C 5 Minutes Maximum
- DC Power:** 15Vdc at 10W Maximum
- Cooling:** Conduction
- Internal Reference:** Built into unit
- RF Leakage:** Within the enclosure 55 dB Minimum over 2 - 20 GHz
- Humidity:** Up to 95%, non-condensing.
- Shock:** Meets MIL-STD-810F Meth. 516.5, Proc. IV and VI
- Vibration:** Meets MIL-STD 810F Meth. 514.5, Proc. II



pin	J1 Description	Definition
1	Clock+	SPI Clk+ (LVDS), 50 MHz input
2	Spare	NC
3	Data+	SPI Data+ (LVDS), Data midpoint at positive clock edge
4	Enable+	SPI Enable+ (LVDS) High during transfer
5	Trigger+	Timing Trigger+ (LVDS) Frequency Trigger
6	Clock-	SPC Clk-
7	Spare	NC
8	Data-	SPI Data-
9	Enable -	SPI Enable-
10	Trigger-	Timing Trigger-
11	Ground	Ground
12	Pulse Modulation In	TTL, 1 = RF Output On (Voh 2.4 nom, Vol 0.4 nom)
13	Ready	Lock Detect and fault indication, 1 = all OK
14	Spare	NC
15	+15Vdc	Power

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: <small>FRACTIONS DECIMALS ANGLES HOLES ± 1/64 .XX±.01 ± 0.30 .XX±.005 .XXX±.005 .XXX±.003 .XXX±.001 MACHINED FINISH: .32 RMS REMOVE BURRS .005 MAX</small>		APPROVALS	DATE	WV Communications 1125 A Business Center Circle Newbury Park, CA
750-50592	SYN1010	TONY T	11/17/2016	
NEXT ASSEMBLY	USED ON	TT	11/17/2016	SYNTHESIZER 2-20GHZ MODEL: SYN1010 (P/N 797967-001)
APPLICATION	DO NOT SCALE DRAWING	TT	11/17/2016	
		TT	11/17/2016	
		TT	11/17/2016	
		AM	11/17/2016	SIZE CAGE CODE DWG. NO. D 1GFQ7 050-51011
		UY	11/17/2016	SCALE Model No. NONE
			SHEET 1 OF 1	REV B

050-51011