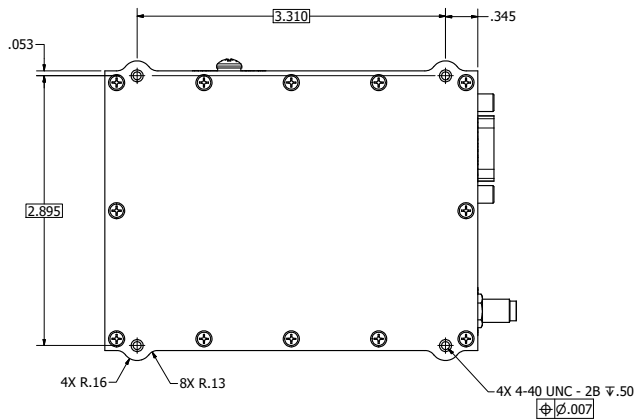
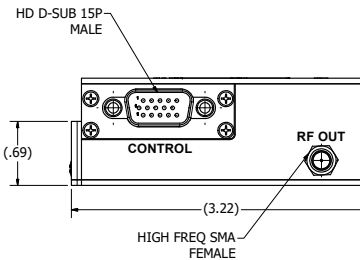
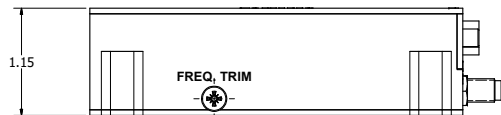
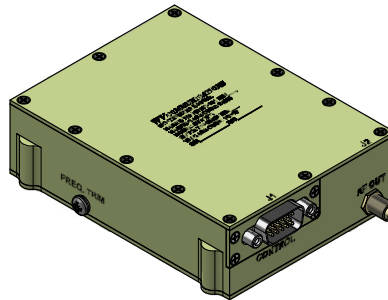
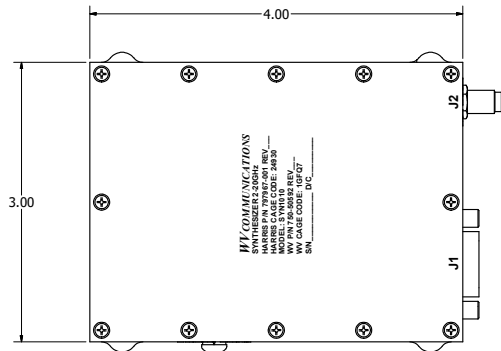


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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	RELEASED	11/17/2016	TT
	B	REDRAWN TO D SIZE ADDED MARKING LABEL PER ECO 20-0009	3/14/17	TT/JUY
	C	SPECS UPDATE	6/11/19	JAKOB



**Output Frequency Range:** 2.0-20.0GHz  
**RF Output Power:** +14 -0/+2dBm  
**RF Frequency Accuracy:** ±2PPM Maximum over -40°C to +85°C  
**RF Frequency Load/Supply:** No frequency pulling or pushing  
**Phase Noise:** -50dBc/Hz Maximum @ 1kHz Offset  
 -60dBc/Hz Maximum @ 10kHz Offset  
 -70dBc/Hz Maximum @ >100kHz Offset  
**Tuning (switching) Speed:** 5-8µs Maximum to within ±1MHz (includes setup time and RF settling time)  
**Frequency Sweep (Chirp):** Max Rate of Change 50MHz/µs  
 Number of Frequency Steps: 20 to 128  
 Chirp Direction: Up, Down  
**Spurious:** -40dBc Minimum  
**Harmonics/Subharmonics:** -11dBc Minimum  
**Output Pulse Modulation:** PRI - 2.0 – 65535µs, CW  
**External TTL gate Pulse):** PW - 0.2 – 9999µs  
**Rise/Fall Time:** 30ns Maximum between 10% and 90% points  
**RF On/Off Isolation:** 60dB min  
**Control:** High Speed Serial Format  
**OP Temperature Range:** -40°C to +65°C  
**Storage Temperature Range:** -55°C to +125°C  
**Warm Up time:** -40°C to -10°C - 10 Minutes Maximum  
 -10°C to +65°C - 5 Minutes Maximum  
**Cooling:** Conduction cooled  
**Internal Reference:** 100.00MHz Built into unit  
**RF Leakage:** Within the enclosure 55 dB Minimum over 2.0 to 20.0GHz.  
**Humidity:** Up to 95%, non-condensing.  
**Shock:** MIL-STD-810F, Meth. 516.5, Proc. IV and VI  
**Vibration:** MIL-STD 810F Meth. 514.5, Proc. II  
**MTBF:** 20,000 Hours Minimum  
**MTTR:** 30 Minutes Maximum  
**DC Input Power:** +15±1VDC at 0.7A Maximum  
**Customer Reference:** L3/Harris Dwg 797697 Rev D

pin	J1 Description	Definition
1	Clock+	SPICik+ (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 (Vol: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:				APPROVALS		DATE
FRACTIONS	DECIMALS	ANGLES	HOLE	DRAWN		
± 1/64	± 0.01	± 0.1°	± 0.005	TONY T		11/16/2016
				CHECKED	TT	11/17/2016
				DESG ENGR	TT	11/17/2016
				ELEC ENGR	TT	11/16/2016
				PRODUCTION	AM	11/17/2016
				G.A.	UY	11/17/2016

NEXT ASSEMBLY USED ON		APPLICATION		DO NOT SCALE DRAWING		SCALE: NONE		SHEET 1 OF 1	
750-50592	SYN1010							<b>WV Communications</b> 1125 A Business Center Circle Newbury Park, CA SYNTHESIZER 2-20GHz MODEL: SYN1010	
								SIZE CAGE CODE	REV
								D 1GFQ7	C
								DWG. NO. 050-51011	

050-51011