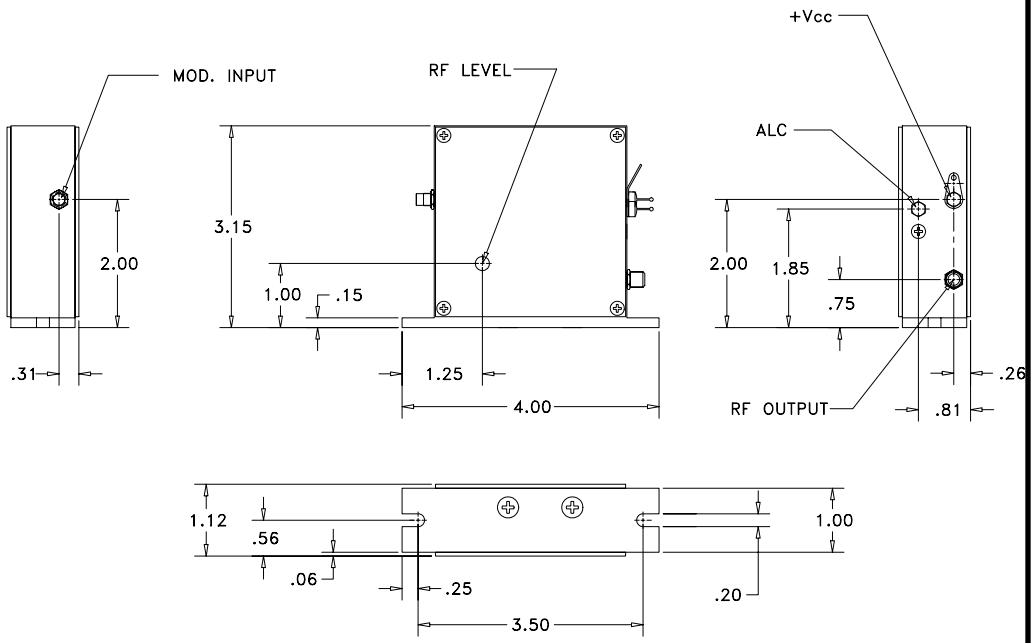
Preliminary Specifications

DESIGN GOALS

Modulation Input	
Input Impedance	50 Ohms
Digital Input (SMB Male)	Standard TTL Levels
RF Output	
Center Frequency (Fc)	40 MHz ± 0.1%
Output Power (SMA Female)	0.5 W
Rise/Fall Time	25 nsec Typ.
RF Contrast Ratio	35 dB min
Harmonic Distortion	-20 dBc
Output Impedance	50 Ohms
Output VSWR	1.5 : 1 Max
Bandwidth	20 MHz
Power Supply Voltage (+Vcc)	+24 V @ 550 mA
ALC Voltage Level	+3.5 to +21 V nominal

OUTLINE DRAWING



Notes:

1. Output power factory set to 0.5 W at a 2.4 V, 30 mA input. Power stability less than 5% over the heat sink's ambient temperature range of 0-40° C, after 5 minute warm-up.

2. When calculating the contrast ratio, it is understood that only the power of the 40 MHz fundamental shall be used. The higher harmonics have no effect on the AO modulator's performance.

3. A +21 Volt nominal input on the ALC corresponds to full RF output power. Zero RF power occurs at an ALC voltage below +3.5 Volts. Full RF power occurs if ALC input is left unconnected.

TOLERANCES: .XX ± .01, .XXX ± .005	DR	T. Moon 10/23/2014	Gooch & Housego		
MATERIAL: RoHS Compliant	CHK		DESCRIPTION: **AODR 1040AF-DIF0-0.5**		
FINISH	APP				
	APP		PART NUMBER: 97-03307-75	REV: 1	1 of 1