

## 8 – 12 GHz 30dBm Amplifier

### FEATURES

- P<sub>1dB</sub> : 30 dBm(min.)
- Bias Condition : 1.2A @ 12 V
- Small Signal Gain : 41 dB

### APPLICATIONS

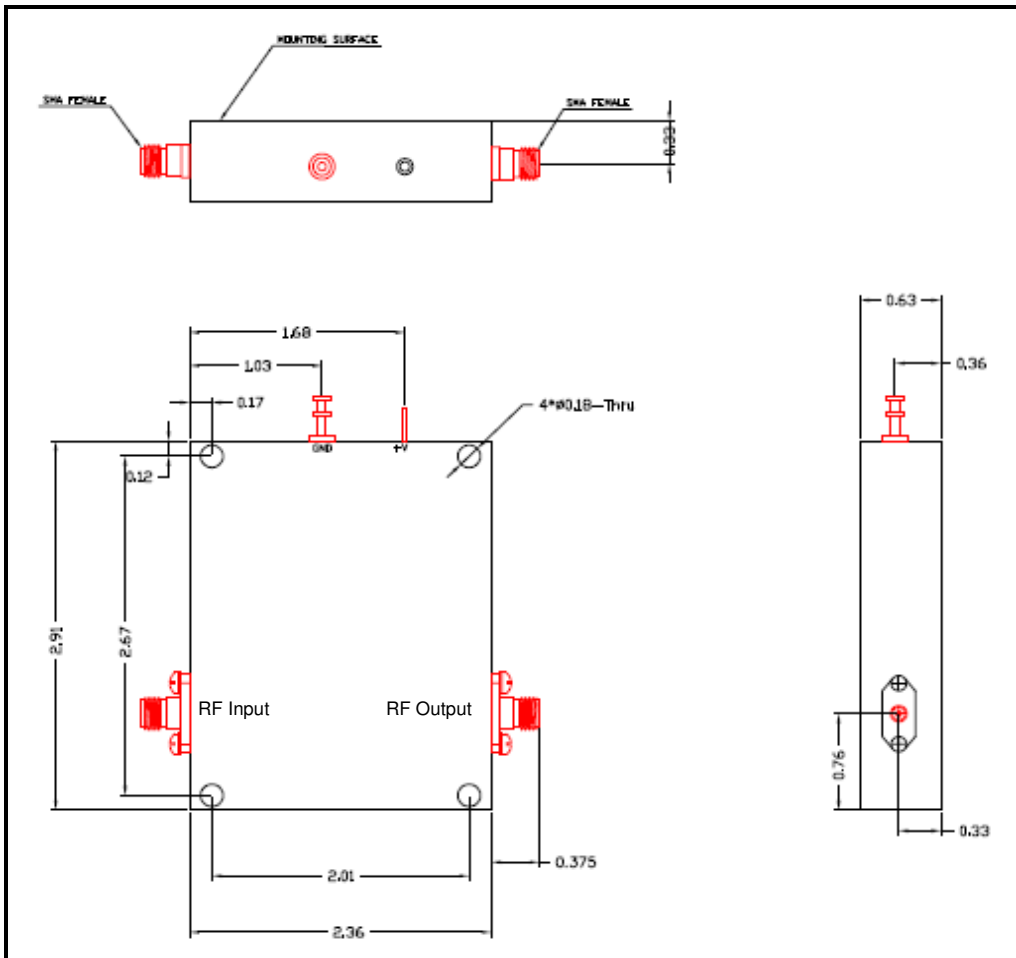
- X-band Radar

### ELECTRICAL SPECIFICATIONS (Ta = 25 °C)

SYMBOL	DESCRIPTION	MIN	TYP	MAX	UNITS
FREQ	Frequency Range	8		12	GHz
SSG	Small Signal Gain, including OTR	41			dB
GOF	Small Signal Gain Flatness		+/-1.0	+/-1.5	dB
NF	Noise Figure		3.5	4.0	dB
P <sub>1dB</sub>	1dB Compression Output Power, including OTR	30			dBm
Psat	Saturation Power, including OTR	31			dBm
Spurious	Spurious Output	-60			dBc
VSWR, IN	Input VSWR			2:1	-----
VSWR, OUT	Output VSWR			2:1	-----
Vdc	DC Supply Voltage		12		Volt
Idc	Current Supply		1.2	1.3	A
OTR	Operating Temperature Range	-30		70	°C

**Outline : HA1, unit is inch**

**Connectors : SMA (F)**



**Transcom X-Band Radar Block Diagram using P/N TA080-120-41-30**

Transcom amplifier heritage supporting global defense radar market...

Transcom radar products afford customers flexibility in designing systems to fit unique requirements, using connectorized product, discrete solution and/or complete solution.

*Transcom amplifier P/N TA080-120-41-30 has been specially design for Radar application and provide with single amplifier to support both transmit and receive channel.*

*For transmit channel: amplifier provide high gain and eliminate necessary of driver providing 1watt of power output connect directly to external T/R switch*

*For receive channel: amplifier provide a decent N.F.*

*Frequency range: amplifier support 8-12GHz band which comply with most of X-Band radar sub-bands*

Typical block diagram for General X-Band radar

