

8 – 12 GHz 30dBm Amplifier

FEATURES

- P_{1dB} : 30 dBm(min.)
- Bias Condition : 1.2A @ 12 V
- Small Signal Gain : 41 dB

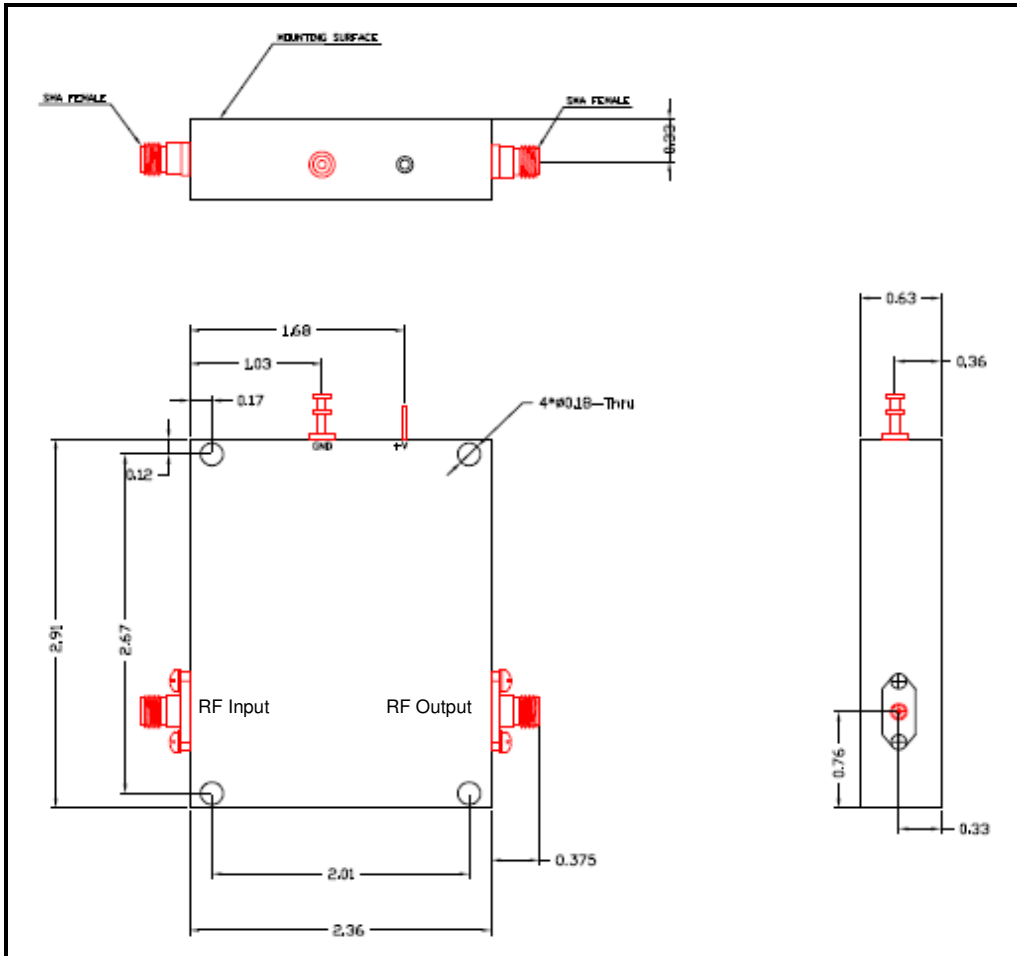
APPLICATIONS

- 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 _{1dB}	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

