

REV2 20121230



## 8.5 - 11 GHz 4W Amplifier

#### **FEATURES**

P<sub>-1</sub> dB: 36 dBm
Noise Figure: 5 dB

• IP3: 44 dBm

Bias Condition: 4500 mA @ 12 V

Small Signal Gain: 30 dB

#### **DESCRIPTION**

The TA085-110-30-35 is a 4 W power amplifier designed for high linearity applications in the 8.5 to 11 GHz frequency range. This amplifier utilizes high power devices that provide excellent linearity, high gain and wide dynamic range. High efficiency operation is achieved by using hybrid MIC designs and advanced GaAs PHEMT devices. The amplifier requires only a +12V DC power supply.

### **ELECTRICAL SPECIFICATIONS at 25 °C**

Symbol	Description	Min.	Тур.	Max.	Unit
FREQ	Frequency Range	8.5		11	GHz
SSG	Small Signal Gain	30*			dB
GOF	Small Signal Gain Flatness		± 0.75	± 1.25	dB
P <sub>-1</sub> dB	Output Power at 1 dB Gain Compression	35	36		dBm
IP3	Third Order Intercept Point	44	45		dBm
NF	Noise Figure		5		dB
VSWR, IN	Input VSWR		1.8:1	2:1	-
<b>VSWR</b> , <b>OUT</b>	Output VSWR		1.8:1	2:1	-
Vdc	DC Supply Voltage (with built-in regulator)		12		Volt
	Current Supply		4.5	5	Α
OTR	Operating Temperature Range	-30		60	°C

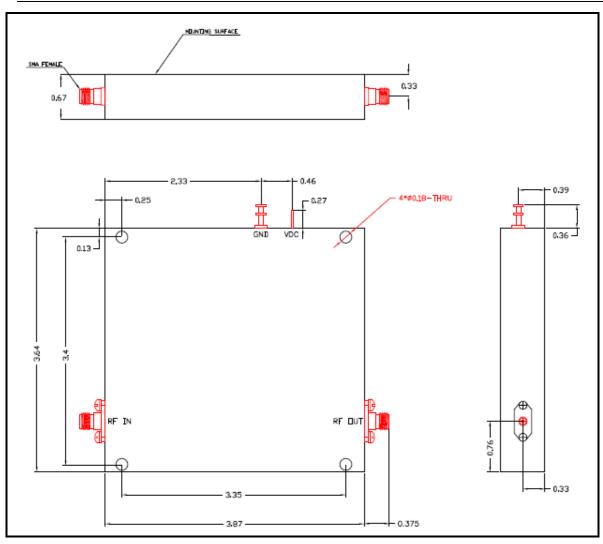
<sup>\*</sup> Actual gain and current depend on configuration.

CASE: HA2B



# TA085-110-30-35

REV2\_20121230



Unit: inch

RF In/Out Connector : SMA Female

DC : soldered feed through pin