

### 8.5 - 11 GHz 1W Amplifier

#### FEATURES

- P<sub>1</sub>dB: 30 dBm
- Noise Figure: 3 dB
- IP3: 38 dBm
- Bias Condition: 900 mA @ 15 V
- Small Signal Gain: 30 dB



#### DESCRIPTION

The TA085-110-30-29 is a 1W power amplifier designed for high linearity application 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 +15V DC power supply.

#### ELECTRICAL SPECIFICATIONS at 25 ° C

Symbol	Description	Min.	Typ.	Max.	Unit
FREQ	Frequency Range	8.5		11	GHz
SSG	Small Signal Gain	30*			dB
GOF	Small Signal Gain Flatness		± 0.5	± 1.0	dB
P <sub>1</sub> dB	Output Power at 1 dB Gain Compression	29	30		dBm
IP3	Third Order Intercept Point	37	38		dBm
NF	Noise Figure		3	4	dB
VSWR, IN	Input VSWR		1.7:1	2:1	-
VSWR, OUT	Output VSWR		1.7:1	2:1	-
VDC	DC Supply Voltage (with built-in regulator)		15		Volt
IDC	Current Supply		0.9	1.1	A
OTR	Operating Temperature Range	-30		60	°C

\* Actual gain and current depend on configuration.

#### CASE: HD7

Note: The previous product part number of TA085-110-30-29 is TC57611.