

3.1 – 3.5 GHz 1W Amplifier

FEATURES

- P_{1dB}: 30 dBm min.
- NF: 4.5 dB max.
- Small Signal Gain: 30 dB typ.
- Bias Condition: 12 V / 900 mA max.

DESCRIPTION

The TA031-035-30-30 is a 30 dBm power amplifier designed for operation in the 3.1 to 3.5 GHz frequency range. This amplifier utilizes high power devices that provide excellent linearity and high gain. High efficiency operation is achieved by using hybrid MIC designs and advanced GaAs PHEMT devices. The amplifier requires a +12V DC power supply.

ELECTRICAL SPECIFICATIONS at 25 °C

Symbol	Description	Min.	Typ.	Max.	Unit
FREQ	Frequency Range	3.1		3.5	GHz
SSG	Small Signal Gain	29	30		dB
GOF	Small Signal Gain Flatness			± 0.7	dB
NF	Noise Figure			4.5	dB
P_{1dB}	Output Power at 1dB Gain Compression	30			dBm
VSWR, IN	Input VSWR		1.7:1	2: 1	-
VSWR, OUT	Output VSWR		1.7:1	2: 1	-
V_{dc}	DC Supply Voltage		12		Volt
I_{dc}	Current Supply			900	mA
ON/OFF Settling Time			1	1.5	μs
OTR	Operating Temperature Range	-40		85	°C

* Actual gain and current depend on configuration.

CASE: HW74