

1 - 18 GHz 16 dBm Amplifier

FEATURES

- P₁ dB: 16 dBm
- Noise Figure: 5 dB
- Bias Condition: 230 mA @ 12V
- Small Signal Gain: 31 dB



DESCRIPTION

The TA010-180-30-15 is a 16 dBm low power amplifier designed for operation in the 1 to 18 GHz frequency range. This amplifier provides high gain and low noise figure. 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.	Typ.	Max.	Unit
FREQ	Frequency Range	1		18	GHz
SSG	Small Signal Gain	30	31*		dB
GOF	Small Signal Gain Flatness		± 1.5	± 2.0	dB
P₁ dB	Output Power at 1 dB Gain Compression	15	16		dBm
P₃ dB	Output Power at 3 dB Gain Compression			22	dBm
NF	Noise Figure		5	7	dB
VSWR, IN	Input VSWR		1.8:1	2:1	-
VSWR, OUT	Output VSWR		1.8:1	2:1	-
VDC	DC Supply Voltage		12		Volt
IDC	Current Supply		0.23	0.25	A
OTR	Operating Temperature Range	-30		60	°C

* Actual gain and current depend on configuration

CASE: HG4

Note: The previous product part number of TA010-180-30-15 is TC6001K.