

3.1 – 3.5 GHz Low Noise Amplifier

FEATURES

- P₁ dB: 15 dBm
- Noise Figure: 1.1 dB
- Bias Condition: 150 mA @ 15 V
- Small Signal Gain: 40 dB



DESCRIPTION

The TA031-035-40-10 is a low noise amplifier designed for application in the 3.1 to 3.5 GHz frequency range. This amplifier utilizes low noise devices that provide excellent noise figure. 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	3.1		3.5	GHz
SSG	Small Signal Gain		40*		dB
GOF	Small Signal Gain Flatness		± 0.3	± 0.5	dB
P ₁ dB	Output Power at 1 dB Gain Compression	10	15		dBm
NF	Noise Figure		1.1	1.2	dB
VSWR, IN	Input VSWR		1.5:1	1.7:1	-
VSWR, OUT	Output VSWR		1.5:1	1.7:1	-
V _{dc}	DC Supply Voltage	10	15	17	Volt
I _{dc}	Current Supply		0.15	0.17	A
OTR	Operating Temperature Range	-30		60	°C

* Actual gain and current depend on configuration.

CASE: HC6

Note: The previous product part number of TA031-035-40-10 is TC5301K.