

## 2 - 18 GHz 13 dBm Amplifier

### FEATURES

- P<sub>1</sub> dB: 13 dBm
- Noise Figure: 4.5 dB
- Bias Condition: 200 mA @ 12 V
- Small Signal Gain: 20 dB



### DESCRIPTION

The TA020-180-20-10 is a 13 dBm medium power amplifier designed for operation in the 2 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	2		18	GHz
SSG	Small Signal Gain	20	22		dB
GOF	Small Signal Gain Flatness		± 1	± 1.5	dB
P <sub>1</sub> dB	Output Power at 1 dB Gain Compression	10	13		dBm
NF	Noise Figure @ 2~8 GHz			4.5	dB
NF	Noise Figure @ 8~18 GHz			4	dB
VSWR, IN	Input VSWR		1.9:1	2:1	-
VSWR, OUT	Output VSWR		1.9:1	2:1	-
V <sub>dc</sub>	DC Supply Voltage (with built-in regulator)	12		15	Volt
I <sub>dc</sub>	Current Supply		0.15	0.2	A
OTR	Operating Temperature Range	-30		70	°C

\* Actual gain and current depend on configuration.

### CASE: HG3

Note: The previous product part number of TA020-180-20-10 is TC6002K.