

## 2.4 –2.5 GHz 4 W Amplifier

### FEATURES

- P<sub>1</sub> dB: 36 dBm
- IP3: 46 dBm
- Bias Condition: 1.7 A @ 8 V
- Small Signal Gain: 36 dB



### DESCRIPTION

The TA024-025-35-35 is a PCB based 4 W power amplifier designed for operation in the 2.4 to 2.5 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 +8V DC power supply and a –2V DC power supply.

### ELECTRICAL SPECIFICATIONS at 25 °C

Symbol	Description	Min.	Typ.	Max.	Unit
<b>FREQ</b>	<b>Frequency Range</b>	2.4		2.5	GHz
<b>SSG</b>	<b>Small Signal Gain</b>	35	36*		dB
<b>GOF</b>	<b>Small Signal Gain Flatness</b>		± 0.5	± 1	dB
<b>P<sub>1</sub> dB</b>	<b>Output Power at 1 dB Gain Compression</b>	35	36		dBm
<b>IP3</b>	<b>Third Order Intercept Point</b>	45	46		dBm
<b>VSWR, IN</b>	<b>Input VSWR</b>		1.7:1	2: 1	-
<b>VDC</b>	<b>DC Supply Voltage (with built-in regulator)</b>		8		Volt
<b>Vg</b>	<b>Gate Voltage</b>		-2		Volt
<b>IDC</b>	<b>Current Supply</b>		1.7	1.9	A
<b>OTR</b>	<b>Operating Temperature Range</b>	-30		60	°C

\* Actual gain and current depend on configuration.

### CASE: HA7

Note: The previous product part number of TA024-025-35-35 is TC5151K.