

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