

0.8 - 5.5 GHz 25 dBm Amplifier

FEATURES

- P₁ dB: 25 dBm
- IP3: 34 dBm
- Bias Condition: 750 mA @ 12 V
- Small Signal Gain: 20 dB



DESCRIPTION

The TA008-055-20-24 is a 25 dBm power amplifier designed for operation in the 0.8 to 5.5 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 only a +12V DC power supply.

ELECTRICAL SPECIFICATIONS at 25 °C

Symbol	Description	Min.	Typ.	Max.	Unit
FREQ	Frequency Range	0.8		5.5	GHz
SSG	Small Signal Gain	20*			dB
GOF	Small Signal Gain Flatness		±0.5	±0.75	dB
GOT	Gain Over Temperature 0~60°C		±1	±1.25	dB
P ₁ dB	Output Power at 1 dB Gain Compression	24	25		dBm
P ₃ dB	Output Power at 3 dB Gain Compression	27	28		dBm
IP3	Third Order Intercept Point	33	34		dBm
IP2	Second Order Intercept Point	47	48		dBm
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		0.75	0.77	A
OTR	Operating Temperature Range	-30		60	°C

* Actual gain and current depend on configuration.

CASE: HC6

Note: The previous product part number of TA008-055-20-24 is TC6021K.