TRANSCOM

TA053-059-41-38

REV1_20040412

5.3 – 5.9 GHz 8W Amplifier



FEATURES

- P_{-1} dB: 39 dBm
- Noise Figure: 4.5 dB
- IP3: 48 dBm
- Bias Condition: 4700 mA @ 12 V
- Small Signal Gain: 41 dB

DESCRIPTION

The TA053-059-41-38 is an 8W power amplifier designed for high linearity applications in the 5.3 to 5.9 GHz frequency range. This amplifier utilizes high power devices that provide excellent linearity, high gain and wide dynamic range. 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**	5.3		5.9	GHz
SSG	**Small Signal Gain**	41*			dB
GOF	**Small Signal Gain Flatness**		± 0.5	± 0.75	dB
P_{-1} dB	**Output Power at 1 dB Gain Compression**	38	39		dBm
IP3	**Third Order Intercept Point**	46	48		dBm
NF	**Noise Figure**		4.5	5	dB
VSWR, IN	**Input VSWR**		1.5:1	1.7:1	-
VSWR, OUT	**Output VSWR**		1.5:1	1.7:1	-
Vdc	**DC Supply Voltage (with built-in regulator)**		12		Volt
Idc	**Current Supply**		4.7	4.9	A
OTR	**Operating Temperature Range**	-30		60	°C

* Actual gain and current depend on configuration.

CASE: HA1

Note: The previous product part number of TA053-059-41-38 is TC5561K.

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