TRANSCOM

TA018-019-48-43

REV2_20040412

PHS Band 8 Watt Amplifier

FEATURES

- ACPR (600 kHz) @ P_{out} = 38.5 dBm : -69 dBc
- Bias Condition : 5.5 A @ +12 V, 20 mA @ -10 V
- Small Signal Gain : 48 dB
- P_{sat} : 43 dBm

DESCRIPTION

The TA018-019-48-43 is a 8W power amplifier designed for high linearity applications in the 1.893 to 1.920 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 advanced GaAs PHEMT devices.

APPLICATION : PHS base station

ELECTRICAL SPECIFICATIONS (Ta = 25 ° C)

SYMBOL	DESCRIPTION	MIN	TYP	MAX	UNITS
FREQ	Frequency Range	1893		1920	MHz
SSG	Small Signal Gain		48		dB
GOF	Small Signal Gain Flatness		±0.3	±0.5	dB
GOT	Gain Variation Over Temperature		±0.5	±1.0	dB
P_{sat}	Output Saturation Power		43		dBm
ACPR	ACPR 600kHz @ Pout = 38.5 dBm, Pi/4 DQPSK, Rate = 384 kbps, BW = 192 kHz, Root-Nyquist, Alpha = 0.5		-70	-69	dBc
VSWR, In	Input VSWR			2 : 1	-----
VSWR, Out	Output VSWR			2 : 1	-----
Vs	DC Supply Voltage (with built-in regulator)		+12		Volt
Id	Current Supply		5.5		A
Vg	DC Supply Voltage		-10		Volt
Ig	Current Supply		20		mA
VDET	Detector Voltage @ 38.5 dBm	2.4		3.4	Volt
OTR	Operating Temperature Range	-10	+25	+80	° C

CASE: HA4

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