

150MOD1296

FEBRUARY 01 - 2007 second edition

Developed and designed for Broadcast applications, this amplifier incorporates micro strip and MOSFET technology to guarantee 300, 500 and above output power if appropriately coupled.

Its high efficiency allows the usage of reduced size radiators (low dissipation) $% \left({{\left[{{{\rm{s}}_{\rm{s}}} \right]}_{\rm{s}}}} \right)$

- 1296 MHz
- 27 29 Volt
- Input / output 50 O
- P_{out} : 150 W ± 1dB
- Gain : ≥ 17 dB
- Class A, AB or C (adjustable)
- 8 mm thick Copper Base
- Teflon pc board



Dimension: (L x W x H) 80 x 65 x 30 mm

ABSOLUTE MAXIMUM RATING (T case = 25 °C)

Symbol		Value	Unit
Vs	Drain Voltage Supply	28	V dc
۱ _s	Supply Current (total)	12 ± 1	A dc
VSWR	Load Mismatch (all phase angles, T _c = 40°C @ 150 W)	5 : 1	
т _{bp}	Base Plated Operating Temperature	40	°C
T _{stg}	Storage Temperature Range	- 20 ÷ + 70	°C

ELECTRICAL SPECIFICATIONS (T case = 38° C, 50 O loaded, Vs = 28V, IA = 12 A \pm 1)

Observation in the second s	T	11.2
Characteristics	тур.	Unit
Operating Frequency Range	1296	MHz
Power Input	5 Watt ±1 dB	Watt
Power Gain	16.5	dB
Power Output (fundamental)	150 watt ±1 dB	Watt
Drain Efficiency (load 50 O)	65	%
Input VSWR	≥1.3 :1	
Insertion Phase Variation (Unit to Unit)	±3	Degrees
Power Gain Variation (Unit to Unit)	±1	dB
F2 Second Harmonic	- 37	dBc
F3 Third Harmonic	- 20	dBc

Dynamic test Vs = 28 V IDQ = 400mA (total) , Copper Base Temperature = 30°c

Frequency MHz	Vdc	P. In Watt	Power output Watt (total)	F2 Second Harmonic	F3 Third Harmonic	Gain dB	Efficiency
	_	_					
1296	+28	5	150 CW	- 40 dBc	- 19 dBc	>16.5	= 65%

COMPONENTS



We recommend the use of the module with an appropriate heatsink and fan of good quality. Use high quality coaxial relais, taking care to close before the output relay and then the input, when you go to TX and open to input and then the output when you switch on RX.

Never exceed the input power, as stated on the label.

Do not use the module with values S.W.R. greater than 1:5.

+28 Vdc power the module on both wires.