



# VHFAMP05-R2

## 5W LDMos Technology

Designed for analog and digital TV transposers and transmitters, this amplifier incorporates microstrip technology and single end LDMos Devices to enhance ruggedness and reliability.

- 170 - 230 MHz
- (28 ±32 V) 30V Nominal
- Input/Output 50 Ohm/ Ohm
- P<sub>out</sub> : 5W CW  
5Wps separate amplification  
3Wps common amplification  
1,5Wrms DAB  
1 Wrms DVB
- Gain : 21 dB min
- Class AB - *very linear*
- Devices: MRF282SR1 or equivalent
- Connectorized version
- Aluminum box



Dimensions (LxWxH) 144.6x92.6x31.5 mm (5.7"x3.65"x1.24")

This picture is a mere example, it does not bind the provided product

## ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V <sub>S</sub>	Voltage Supply	35	V dc
I <sub>S</sub>	Current Supply	4	A dc
T <sub>stg</sub>	Storage Temperature Range	-30 + 100	°C
T <sub>c</sub>	Operating base plate Temperature	0 + 75 <sup>1</sup>	°C
ψ	VSWR max	3:1 all phase angle	-
	Max input power	+6	dB

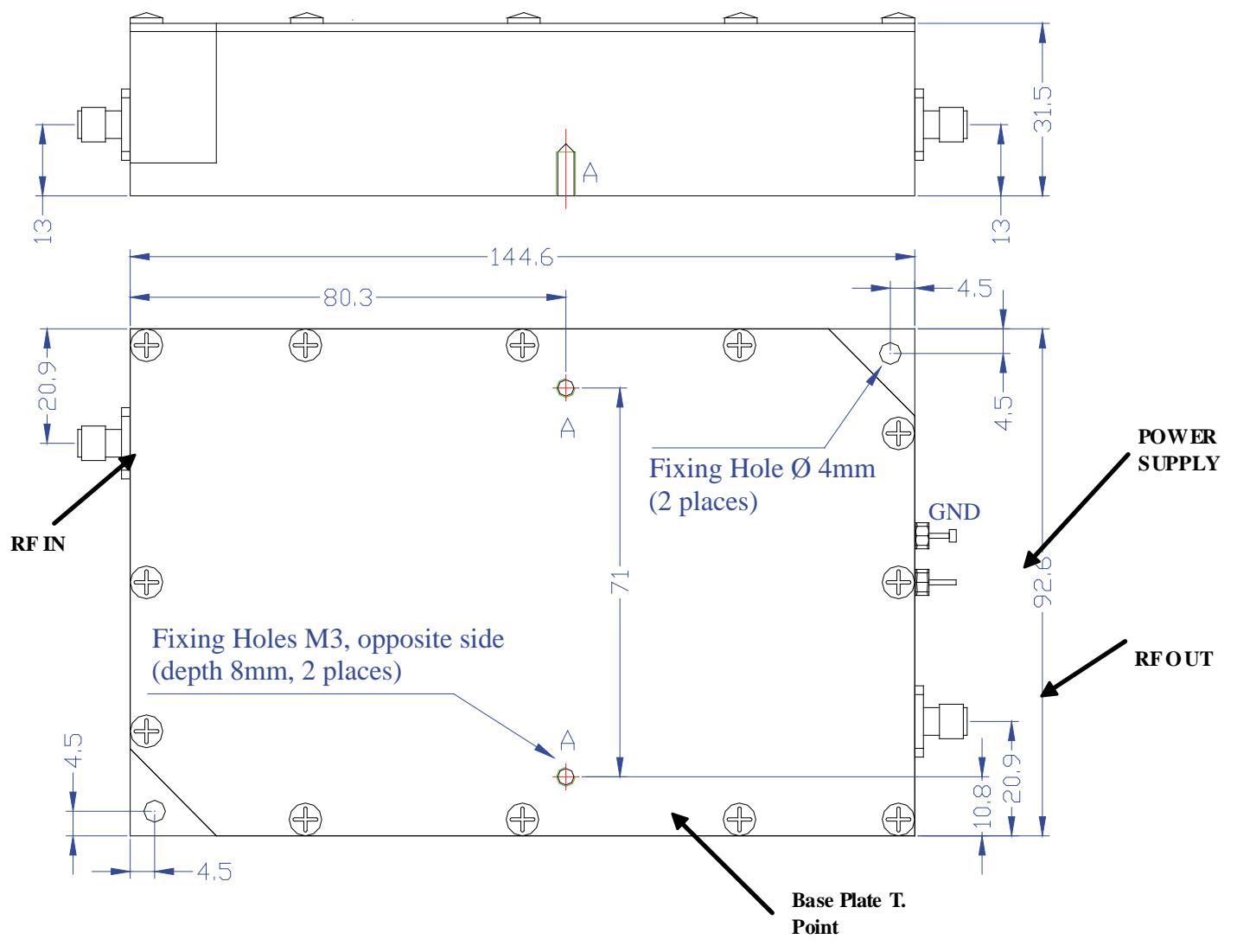
## ELECTRICAL SPECIFICATIONS (Base Plate T. = 25 °C, 50 Ohm loaded, V<sub>d</sub> = 30V)

Symbol	Parameter	Test Conditions	Value			Unit
			Min	Typ.	Max	
BW	Bandwidth	P <sub>out</sub> = 5 W (CW)	170	-	230	MHz
G <sub>p</sub>	Power gain	P <sub>ref</sub> = 5 W (CW)	20.5	21.5	-	dB
P <sub>out</sub> - 1dB	Power Output @ 1dB	Reference to P <sub>out</sub> = 1W (CW)	7	12	-	W
I <sub>q</sub> *	Quiescent Current	P <sub>out</sub> = 0 W - Total *	-	-	0,6	A
I <sub>tot</sub> *	@ P <sub>Max</sub>		-	-	1.5	A
I <sub>r</sub>	Input return	P <sub>out</sub> = 5W CW	16	20	-	dB
	Load mismatch	P <sub>ref</sub> = 5W CW, f= 230MHz, load VSWR = 2:1, all phase angles	No degradation in P <sub>out</sub>			
G <sub>r</sub>	Gain Flatness	P <sub>ref</sub> = 5W CW, BW: 170-230MHz	-	-	±0,5	dB
η	Drain Efficiency	P <sub>out</sub> = 5W (CW)	25	-	-	%



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## PC BOARD LAYOUT AND CONNECTIONS





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