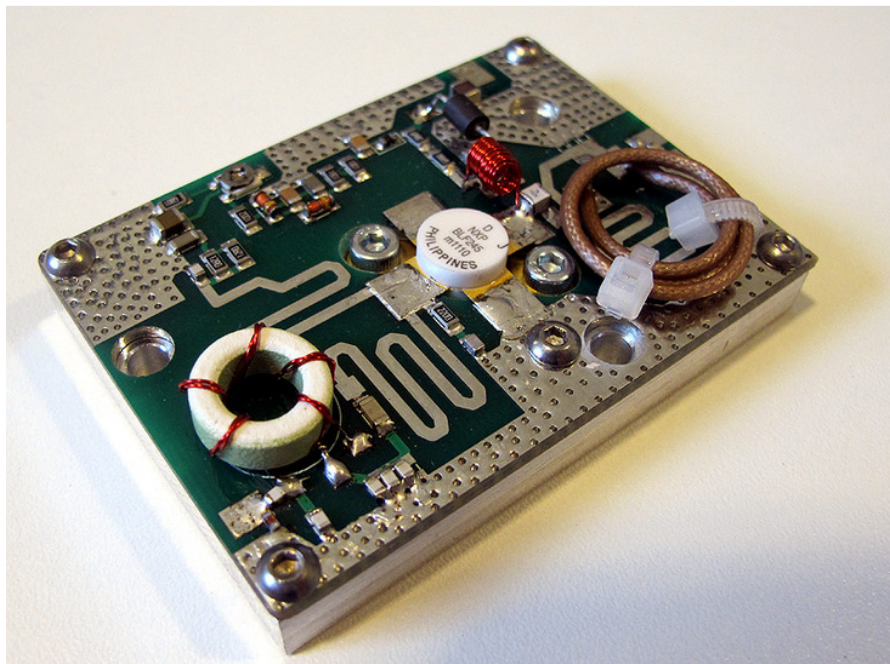


PA25-28V-4M is a compact power amplifier on an 8mm aluminium base. This amplifier is designed for use in 4M amateur radio equipment.

Features:

- designed for stability and long term reliability.
- easy mounting on heat sink by 3 screws.
- small dimensions only 70x50x30 mm
- no-tune operation.
- efficiency 65% typical, @ 28V operation
- disable/agc connection.
- ATC-B & microwave capacitors on RF-circuit.
- Hi Pass input filter



ELECTRICAL SPECIFICATIONS (Base Plate T. = 45 °C, 50Ω loaded, Vd = 28 V)				
Characteristics	Min	Typ	Max	
Operating Frequency Range	65		75	Mhz
Power Output	25			W
Power Input		0.25		W
Power Gain		20		dB
Drain Efficiency (Load 50Ω)		65		%
Input VSWR			1.4	
Insertion Phase Variation (Unit to Unit)		< 10		degrees
Power Gain Variation (Unit to Unit)		+/- 1		dB
F2 Second Harmonic suppression (140 MHz)		-20		dB
F3 Third Harmonic suppression (210MHz)		-30		dB

ABSOLUTE MAXIMUM RATING (T case = 70 °C.)			
Symbol	Parameter	Value	Unit
Vs	Drain Voltage supply	31	V dc
Is	Supply Current	2	A dc
VSWR	Load Mismatch (all phase angles, Tc=45°C)	3:1	
Tstg	Storage Temperature Range	-20 / +70	°C
Tc	Operating Temperature	65	°C

Drill plan

A full size drill plan is provided with your amp.

HEATSINK MOUNTING/HARDWARE

1.HEATSINK TOOLING

Planarity: typical value 0.8μ
Roughness: better than 0.03 mm

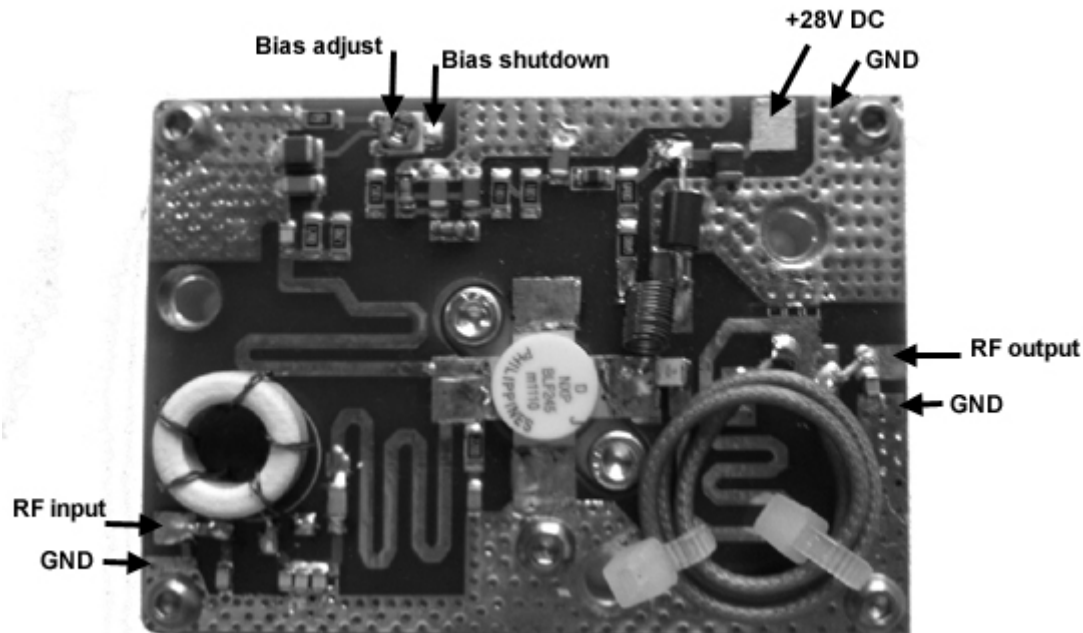
2.THERMAL COMPOUND

Paste without silicones
Thickness: optimum between 0.06 mm and 0.15 mm, on the whole back surface of the amplifier.

3.SCREWS

M3 hexagon socket head cap screws
The recommended Torque is 12 Kg/cm for M3 type screws.

Connections



RF input, connect the inner conductor of 50 Ohm coax to this point.
GND, connect the outer conductor of 50 Ohm coax to this point.

Bias adjust, this is factory set for best overall result.

Bias shutdown, connect this point to ground or vswr protection circuit

+28V, connect the +28V DC 2 Ampere power supply to this point,

GND Connect the 0 volt to GND or the heat sink.

Output, connect the inner conductor of 50 Ohm Teflon coax to this point.

GND, connect the outer conductor of 50 Ohm Teflon coax to this point.

Product and environmental safety - toxic materials

The RF Power Mosfet Transistor contains beryllium oxide. The product is entirely safe provided that the BeO disc is not damaged. All persons who handle, use or dispose of this product should be aware of its nature and of the necessary safety precautions. After use, dispose of as chemical or special waste according to the regulations applying at the location of the user. It must never be thrown out with the general or domestic waste. *WARNING! BERYLLIUM OXIDE IS DEADLY*

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