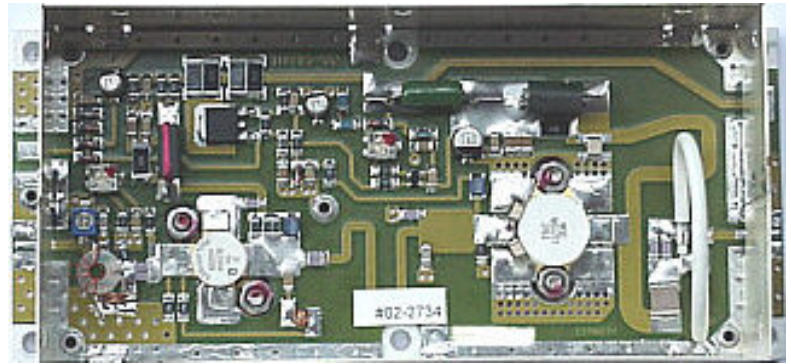


TECHNICAL INFORMATION

This is a highest quality Professional VHF TV linear amplifier broadband from 175 MHz- 225 MHz. This amplifier needs only 8 mW RF power for 20 W output. Power supply requires DC voltage 28 V /3 A. Extremely linear this amplifier has been made for small TV stations and studios. It is excellent as an exciter for high power TV stages. Everything is assembled and tested. Power transistors are made by Philips. Warranty one year includes all components except output transistor. A highest quality PC board is double sided and silver plated. This amplifier must be installed on a heat sink (not included). Board size is: 4" X 2".



- 174 - 230 MHz
- 28 Volts
- Input/Output 50 Ω - 50 Ω
- Pout : 20 W cl. A
- Gain : 32 dB typ.
- Devices: MS1277 or equivalent

TECHNICAL SPECIFICATIONS

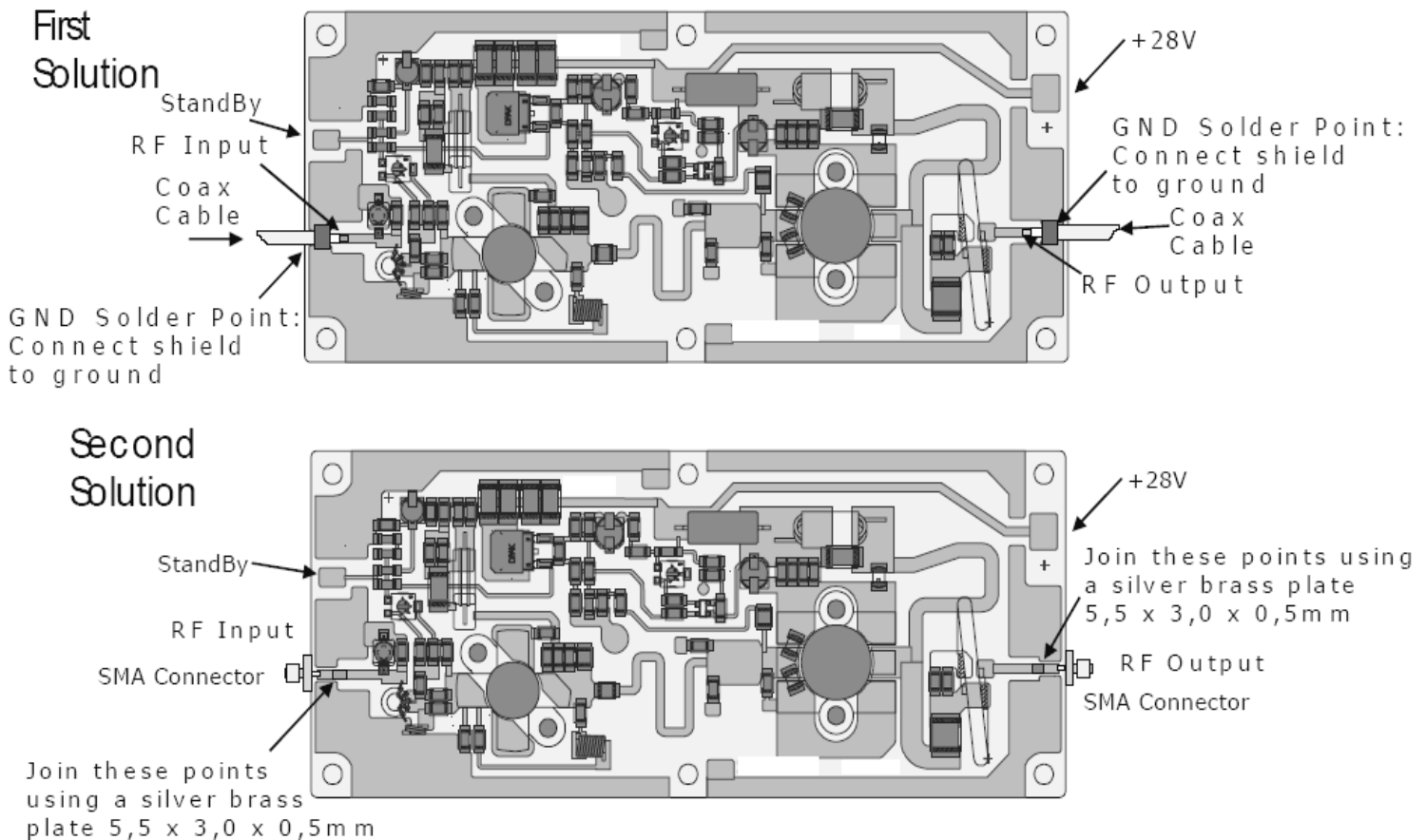
ABSOLUTE MAXIMUM RATINGS (Device Flange T = 70 °C)

Symbol	Parameter	Value	Unit
Vs	Collector Voltage Supply	30	V dc
Is	Current Supply	3.4	A dc
Tstg	Storage Temperature Range	-30 + 100	°C
Tc	Operating Case Temperature	-20-55	°C

ELECTRICAL SPECIFICATIONS (Base Plate T. = 45 °C, 50Ω loaded, Vs = 30 V)

Symbol	Parameter	Test Conditions	Value			Unit
			Min	Typ.	Max U	
BW	BW & Flatness	Pout = 15W (CW ± 0.5dB)	174		230	MHz
Gp	Power gain	Pref = 15W	30	32	-	dB
Pin	Power Input	Reference to Pout = 15 W		15	20	mW
Irl	Input return loss	Pin = 10 W	15	20	-	dB
VSWR	VSWR	∞:1 all phase angles	-	20	-	W
Imd A	Intermodulation Distortion - 3 tones	Vision carrier: -8 dB Sound carrier: -7 dB Croma carrier: -16 dB f = 230 MHz Vs = 28V Pref = 15 W	-	-54	-	dBc

PC BOARD LAYOUT AND CONNECTION SOLUTIONS



HEATSINK MOUNTING/HARDWARE

1.HEATSINK TOOLING

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

2.THERMAL COMPOUND

- Paste with silicones
- Thickness: optimum between 0.06 mm and 0.15 mm, on the whole back surface of the amplifier.

3.SCREWS

- M3 -Cross head screws
- The recommended Torque is 12 Kg . cm (10.5 in . lbs).

4.TIGHTENING ORDER

- See next figure:

