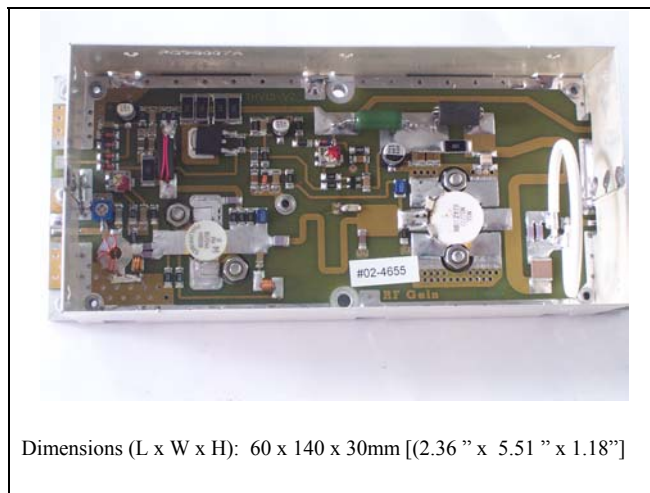


15 W Class A VHF Amplifier

Designed for TV transposers and transmitters, this amplifier incorporates microstrip technology and discrete linear transistor and mosfet with gold metallization and diffused emitter ballast resistors to enhance ruggedness and reliability.

- 174 - 230 MHz
- 28 Volts
- Input/Output 50 Ω - 50 Ω
- P_{out} : 15W cl. A
- Gain : 32 dB typ.
- Devices: MS1277 or equivalent



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

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

Symbol	Parameter	Value	Unit
V _S	Collector Voltage Supply	30	V dc
I _S	Supply Current	3.4	A dc
T _{stg}	Storage Temperature Range	-30 + 100	°C
T _c	Operating Case Temperature	-20 + 55	°C

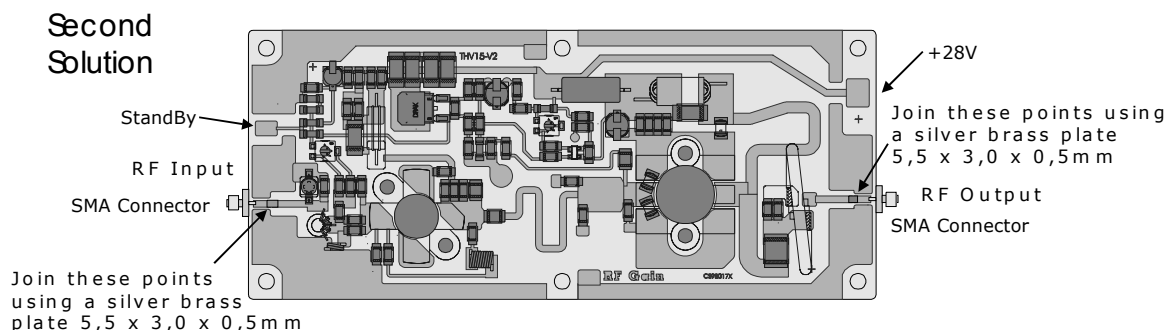
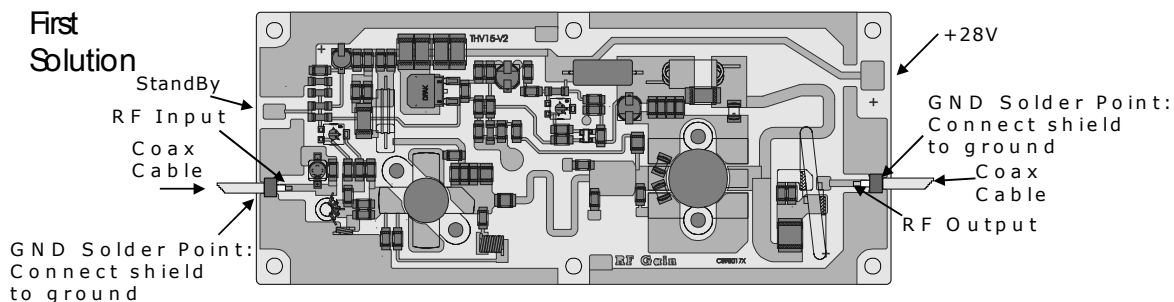
ELECTRICAL SPECIFICATIONS (Base Plate T. = 45 °C, 50 Ω loaded, V_s = 30 V)

Symbol	Parameter	Test Conditions	Value			Unit
			Min.	Typ.	Max.	
BW	BW & Flatness	P _{out} = 15W (CW \pm 0.5dB)	174		230	MHz
G _p	Power gain	P _{ref} = 15W	30	32		dB
P _{in}	Power Input	Reference to P _{out} = 15 W		15	20	mW
I _{rl}	Input return loss	P _{in} = 10 W	15	20		dB
VSWR	VSWR	∞ :1 all phase angles	-	15	-	W
Imd A	Intermodulation Distortion - 3 tones	Vision carrier: -8 dB Sound carrier: -7 dB Croma carrier: -16 dB f = 230 MHz V _S = 28V P _{ref} = 15 W	-	-54	-	dBc

Available exclusively from Richardson Electronics, Ltd. - 800-737-6937 (U.S. & Canada) - 630-208-3637 (International) - or visit www.rell.com/locations.asp for a complete listing of Richardson's worldwide locations.

15 W Class A VHF Amplifier

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

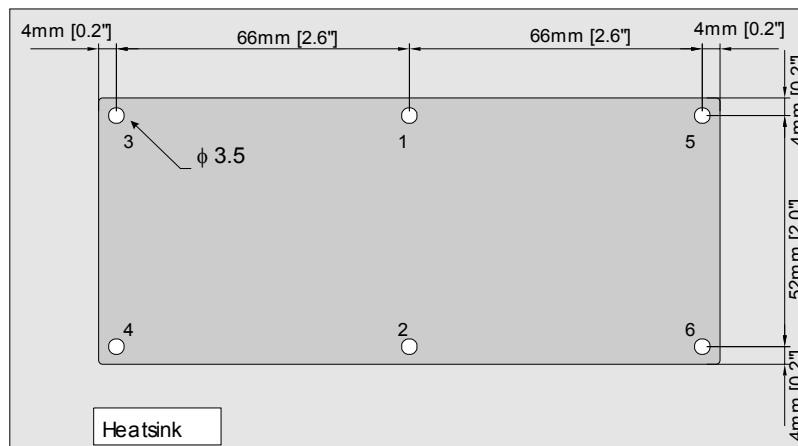
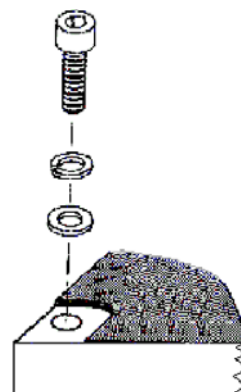
- Paste with silicones
- Thickness: optimum between 0.06 mm and 0.15 mm, on the whole back surface of the amplifier.

3. SCREWS

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

4. TIGHTENING ORDER

- See next figure:



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