

UNIT 13
 YOUNGS INDUSTRIAL ESTATE
 PAICES HILL
 ALDERMASTON
 READING RG7 4PQ



WOOD & DOUGLAS

VHF/UHF COMMUNICATION PRODUCTS

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WDV400/1200 VARACTOR TRIPLER

0385

The WDV400/1200 is our first line approach to generating a respectable amount of power at 24cms for FMTV applications. It could also be re-tuned to the narrow band segment of the 23cms band if desired.

The unit is designed to be driven by a 10 Watt signal at 420MHz. This could consist of the UFM01 and subsequent amplifiers such as the 70LIN3/LT and 70FM10. The output from the WDV400/1200 will be typically 4 Watts or better for 10 Watts drive. Spurious outputs will be typically -50dBc.

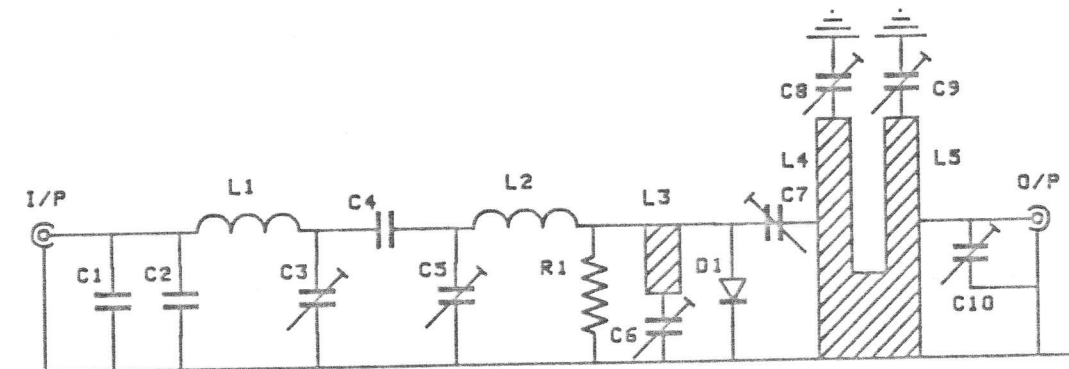
The unit has adequate heatsinking at this drive level. If you have higher drive power available we recommend replacing the fitted heatsink with a type having a better thermal rating. It is recommended that the drive power should not exceed 20W.

Unless you have access to a spectrum analyser we do not recommend blind 'twiddling' of the trimmers on this unit. At best you will get a little improvement. You could possibly face the price of a new varactor diode!

Specification

Drive Level	:	10 Watts @ 420MHz
Output Level	:	4 Watts typical @ 1260MHz
Spurious Outputs	:	<-50dBc @ 864MHz
Thermal Rating of Heatsink	:	4.2°C/Watt
Connectors	:	BNC as standard
Components Used - Varactor	:	Mullard BXY35a
- Trimmers	:	Oxley Developments PTFE types

Circuit Diagram



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