

**NEW!**

**THOMSON VARIAN INTRODUCES A NEW REFLEX  
KLYSTRON FOR THE 11 Gc COMMUNICATION BAND  
TV 2212**

The TV 2211 communication klystron has been introduced one year ago for every microwave application in the band from 10.5 to 13.3 Gc. New production tubes offer substantially improved performance over earlier tube types and are the result of one year's development efforts at THOMSON-VARIAN.

The TV 2211 tubes are now available with a minimum output of 750 mW over a 750 Mc range. Designated the TV 2211 A (10.50 - 11.25 Gc), TV 2211 B (11.15 - 11.90 Gc), TV 2211 C (11.90 - 12.60 Gc), TV 2211 D (12.60 - 13.35 Gc), these klystrons operate with 750 V beam voltage and -400 V max reflector voltage to provide the customers with the possibility of designing their equipment in using the same supplies as for the TV 220/222 tubes.

TV 2211 D is the ideal tube for mobile system applications; it covers the transportable television relays frequency allocation of 12.7 to 13.25 Gc.

Each tube A and B covers one half of the total frequency band of 10.7 to 11.7 Gc for multi-channel telephony radio-relay systems (C.C.I.R. recommandation 387).

For applications where only 500 mW output is required, THOMSON-VARIAN introduces the new TV 2212 REFLEX KLYSTRON which covers one Gc range. It is now possible to operate over the total frequency allocation of 10.7 to 11.7 Gc with one tube designated TV 2212 A which provides facilities for replacement and stock.



Both tubes (TV 2211 and TV 2212) present also the following main features :

- Long life performance
- Adjustment to optimize coupling of tube to external network
- Excellent modulation characteristics
- Possibility of use as local oscillator with 300 V supply
- Excellent frequency stability (temperature coefficient lower than 25 kc/°C) without the use of A. F. C. circuits
- Cooling by conduction or with the use of suitable cooling fins

A special boiler has been developed for vapor cooling technique when extreme frequency stability is required.

Write for more information to :

- THOMSON-VARIAN, for France  
6, rue Mario Nikis, Paris XV°
- VARIAN ASSOCIATES, for the U. S. and Canada  
611 Hansen Way, Palo Alto (Calif.)
- VARIAN ASSOCIATES Ltd, for Great-Britain  
Russell House, Molesey Road, Walton-on-Thames
- VARIAN A. B. for Scandinavia  
Bagatorpsringen 48, Stockholm/Solna 8
- VARIAN S.p.a., for Italy  
Via C. Battisti 2, Torino
- VARIAN GmbH, for Germany, the Netherlands and Belgium  
Industriestrasse 54, Stuttgart-Vaihingen

VARIAN AG, for the other European and Middle East countries,  
Baarerstrasse 77-79, Zug - Switzerland