

# >> 2019(1453) UHF tetrode

■ *Peak-of-sync output power in combined amplification:10.5kW*

*Peak-of-sync output power in vision carrier amplification :22kW*

## General characteristics

Cathode .....Thoriated tungsten  
 Heating ..... Direct  
 Filament voltage.....4.2 V(1)  
 Filament current..... 146A(1)  
 Interelectrode capacitances,approx:  
     Cathode-control-grid..... 72 pF  
     Control-grid-screen-grid.....93pF  
     Screen-grid-anode.....13.2pF  
 Transconductance( $I_a=2.5A, U_{g2}=300V$ )..... $\geq 80mA/V$   
 Internal amplification factor,average.....8  
 Operating position.....Vertical,anode up  
 Weight, approx. .... 4.1 kg  
 Dimensions .....See page 95  
 Anode cooling(2) .....Hypervapotron  
     Air flow ,min. ....15l/min  
     Pressuer at water inlet,max. .... $5 \times 105Pa$   
     Temperature at air water outlet,max. ....80°C  
 Cooling at the sealing between electrode terminal and ceramic: Forced air  
 Temperature on the surface of the tube,max. ....300°C

(1)The operating filament voltage must be defined according to each particular situation.

As an indication for equipment design purposes only, a given filament voltage of 4.2V produces a given filament current of 146A.

(2) Values for cooling given for maximum anode dissipation

## Typical operation



## Maximum ratings

Frequency.....1000MHz  
 Anode voltage .....7.5kV  
 Anode current.....5.5A  
 Anode dissipation.....25kW  
 Control-grid dissipation..... 50W  
 Screen-grid dissipation..... 120W

	Combined Amplification	Vision only	
Frequency	700	700	MHz
Peak-of-sync output power	10.5	22	kW
Bandwidth(-1dB)	8	6	MHz
Intermodulation distortion	-48	-	dB
Gain	15	15.1	dB
Anode voltage	5.5	7.3	kV
Screen-grid voltage	600	800	V
Anode current(with signal)	3.45	4.3	A
Anode current(at zero signal)	1.5	1.6	A
Control-grid current	20	20	mA
Screen-grid current	50	60	mA