

# >> DB 931 (1450) UHF tetrode

■ **Operating frequency:850MHz**

**Peak-of-sync output power in combined amplification:1.1 kW**

## General characteristics

Cathode .....Thoriated tungsten  
 Heating .....Direct  
 Filament voltage.....6V  
 Filament current.....34A  
 Interelectrode capacitances  
     Cathode-Control-grid.....40pF  
     Cathode-grid-Screen-grid.....50pF  
     Screen-grid-anode.....8.2pF  
 Transconductance.....40mA/V  
 Internal amplification factor.....7  
 Operating position.....Vertical,anode up  
 Weight.....2.1kg  
 Dimensions.....See page 95  
 Anode cooling.....Hypervapotron  
 Water flow,min,.....3L/min  
 Pressure at the water inlet,max,..... $5 \times 10^5$ Pa  
 Temperature at the water outlet..... $\leq 100^\circ\text{C}$   
 Cooling at the sealing between electrode and ceramic.....Forced air  
 Temperature on the surface of the tube,max,..... $250^\circ\text{C}$



## Maximum ratings

Frequency..... 1000MHz  
 Anode voltage..... 5kV  
 Anode current..... 2A  
 Anode dissipation ..... 5kW  
 Control-grid dissipation..... 5W  
 Screen-grid dissipation..... 25W

## Typical operation

	Common amplification	Vision only	
Frequency	850	850	MHz
Peak-of-sync output power	1.1	2.2	kW
Bandwidth(-1dB)	8	6	MHz
Intermodulation distortion	-54	-	dB
Gain	15.5	15.5	dB
Anode voltage	4	4	KV
Screen-grid voltage	400	400	V
Anode current (with signal)	0.8	1.5	A
Anode current (at zero signal)	0.5	0.5	A
Control-grid current	$\approx 0$	2	m A
Screen-grid current	5	8	m A