

UHF TETRODE

TH582

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	72pF
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.	4.1kg
Dimensions	See page 95
Anode cooling(2)	Vapour cooled
Airflow, min.	15l/min
Pressure at water inlet, max.	5 105Pa
Temperature at air water outlet, max.	80°C
Cooling at the sealing between electrode terminal and ceramic	Forced air
Temperature on 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 max. anode dissipation	

MAXIMUM RATINGS

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



TYPICAL OPERATION

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