TH 327 UHF tetrode

■ Output power

up to 550 W
peak-of sync in common amplification
up to 1.2 W in sound carrier amplification

General characteristics

Cathode ..... thoriated tungsten
Heating (1) ..... direct
Interelectrode capacitances, approx.:
- cathode-control grid ..... 40 pF
- control grid-screen grid ..... 50 pF
- screen grid-anode ..... 8.2 pF

Amplification factor, average 7
Transconductance (Ia = 1.5 A, Vg2 = 400 V) ..... 40 mA/V
Operating position ..... vertical
Weight, approx. ..... 2.3 kg
Dimensions ..... see page 55
Anode cooling (2) ..... forced air
- air flow, min. ..... 2 m^3/mn
- corresponding pressure drop ..... 2 mbar
- outlet air temperature, max. ..... 100 °C

Electrode terminal and ceramic seal cooling
- type ..... forced air
- temperature on the tube, max. ..... 250 °C

Maximum ratings

Frequency ..... 1000 MHz
Anode voltage ..... 5 kV
Anode current ..... 2 A
Anode dissipation ..... 4.5 kW
Control-grid dissipation ..... 5 W
Screen-grid dissipation ..... 25 W

(1) Thomson Tubes Electroniques defines the operating voltage according to each particular situation.
As an indication for equipment design purposes only, a heater voltage of 6 V produces a heating current of 34 A.

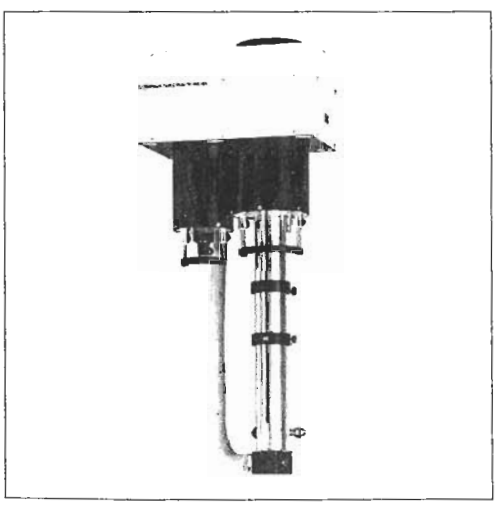
(2) Values for cooling given for anode dissipation of 2 kW.

Typical operation at 800 MHz in the matched cavity TH 18363

	Common amplification	Sound only	
Peak-of-sync output power	550	-	W
Sound carrier output power	-	1200	W
- 1 dB bandwidth	10	10	MHz
Intermodulation products	- 54	-	dB
Gain	15.5	15.5	dB
Anode voltage	3.5	4	kV
Screen-grid voltage	400	400	V
Anode current, with signal	0.65	1	A
Screen-grid current	2	5	mA
Control-grid current	negligible	negligible	
Anode current at zero signal	0.5	0.5	A

TH 18363 matched circuit assembly

For UHF-TV transmitters and translators (Bands IV and V)



Operating frequency ..... 470 to 860 MHz
Dimensions ..... 644 x 268 x 200 mm
Weight, approx (without tube) ..... 20 kg
RF connections:
- input ..... female, type N
- output ..... standard EIA 7/8"

Cooling ..... forced air