

**Up to 22 kW**

- Frequency up to 120 MHz
- Excellent linearity
- High operating stability due to Pyrobloc<sup>®</sup> pyrolytic-graphite grids
- Forced air cooling





TH 345

The TH 345 is a ceramic-metal tetrode of coaxial structure, designed for use in linear amplifiers of FM radio transmitters. It has Pyrobloc grids and is air cooled, resulting in high stability, excellent linearity and a long operational lifetime. This tube is part of the Thales Electron Devices range of FM tetrodes

which offers simple transmitter design and operation, high efficiencies, and excellent RF signal amplification characteristics.

This product is designed, developed and manufactured at an ISO 9001 registered production site.

**General characteristics**

Heater supply (1)	9 V / 120	A
Amplification factor	7	
Transconductance (Ia = 3 A, VG2 = 800 V)	80	mA / V

**Maximum ratings**

Frequency	120	MHz
Anode voltage	12	kV
Anode current	6	A
Anode dissipation	16	kW
Control-grid dissipation	70	W
Screen-grid dissipation	270	W

**Typical operation at 108 MHz grounded-cathode operation**

	Ex. 1	Ex. 2	
Output power	11.3	22	kW
- 0.2 dB bandwidth	300	300	kHz
Gain	18	16	dB
Anode voltage	9	9	kV
Screen grid voltage	600	800	V
Control grid bias voltage	- 140	- 140	V
Anode current, with signal	1.6	3.4	A
Screen grid current	100	230	mA
Control grid current	5	20	mA

**Mechanical characteristics**

Overall dimensions :

Height	198	mm
Diameter	200	mm
Weight	7	kg

(1) For power supply design only. Thales Electron Devices defines the operating voltage according to each particular operating conditions. This values must be observed to within ± 2 %.

This document cannot be considered to be a contractual specification. The information given herein may be modified without notice due to product improvement or further development. Consult Thales Electron Devices before making use of this information for equipment design.



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