

ELECTRONIC TUBE REFERENCE

TH331

Power - Tetrode (NOT beam) (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TETRODE

Forced-air-cooled coaxial ceramic-metal tetrode designed for high-power linear television-translator service. Its construction provides substantial broadband RF output for relay transmitters.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	5 V / 65 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Tetrode	
TRANSCONDUCTANCE	0.05 S
AMPLIFICATION FACTOR	5
MAXIMUM PLATE VOLTAGE	5200 V
MAXIMUM SCREEN VOLTAGE	600 V
MAXIMUM PLATE DISSIPATION	7000 W
MAXIMUM SCREEN DISSIPATION	75 W
MAXIMUM GRID DISSIPATION	5 W
Promoted from printed general-characteristics and maximum-ratings tables.	

The Thomson-CSF TH331 is a forced-air-cooled coaxial ceramic/metal tetrode for high-power linear television-translator service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1972 Thomson CSF

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1972 THOMSON CSF

Section 1 · Tetrode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	5	—
Transconductance	50000 μ S	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum anode voltage	5200 V	—
Maximum screen-grid voltage	600 V	—
Maximum anode dissipation	7000 W	—
Maximum screen-grid dissipation	75 W	—
Maximum grid dissipation	5 W	—
Maximum operating frequency	1000 MHz	—
Typical frequency	780 MHz	—
Typical filament voltage	4.8 V	—
Typical anode voltage	3500 V	—
Typical screen voltage	500 V	—
Typical anode current	1.8 A	—
Gain	13 dB	—
Peak video power	1000 W	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-anode/input capacitance	43 pF	—
Grid-cathode/output capacitance	9 pF	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode-anode capacitance	0.07 pF	—