

ELECTRONIC TUBE REFERENCE

TH3517

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRAVELINGWAVE

Forced-air-cooled 14 GHz high-power traveling-wave amplifier for advanced satellite-communications earth stations, delivering kilowatt-class continuous-wave RF output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6 V / —	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 TravelingWave	
MAXIMUM PLATE VOLTAGE	16000 V
MAXIMUM CATHODE CURRENT	900 mA

Forced-air-cooled 14-GHz high-power TWT for advanced satellite-communications earth stations.

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 · TravelingWave

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Frequency Range	14.0-14.5 GHz	—
Heater Voltage	6 V	—
Heater Current	3.5-4.0 A	—
RF Output Power	>=2 kW	—
Gain	35-38 dB	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Helix/Beam/Anode Voltage	16000 V	—
Cathode/Beam Current	900 mA	—
Warm-up Time	4 min	—
Beam Voltage Maximum	16000 V	—
Collector Voltage Maximum	10000 V	—
Collector Dissipation Maximum	10000 W	—
Cooling Airflow Minimum	10 kg/min	—

TUBE TINKER

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and their source documents.

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