

ELECTRONIC TUBE REFERENCE

TH3544

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRAVELINGWAVE

High-efficiency 14 GHz traveling-wave amplifier for multicarrier communications service, providing approximately 160 W output with high gain.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	7 V / —	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 TravelingWave	
MAXIMUM PLATE VOLTAGE	5800 V
MAXIMUM CATHODE CURRENT	130 mA

High-efficiency 14-GHz TWT for multicarrier communications 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 · TravelingWave

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Frequency Range	14-14.5 GHz	—
Heater Voltage	7 V	—
Heater Current	1.0-1.1 A	—
RF Output Power	160 W	—
Gain	≥ 50 dB	—
Anode Voltage	4.7-5.2 kV	—
Helix Voltage	5.4-5.8 kV	—
Cathode Current	110-130 mA	—
Efficiency	35 percent	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Helix/Beam/Anode Voltage	5800 V	—
Cathode/Beam Current	130 mA	—
Warm-up Time	3 min	—
Collector Voltage Maximum	3800 V	—