



ELECTRONIC TUBE REFERENCE

F4181

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRAVELINGWAVE

Conduction-cooled 5.925–6.425 GHz traveling-wave power amplifier for radio-link communications, rated for at least 25 watts saturated output and 37 dB gain.

GENERAL CHARACTERISTICS

BASE DESIGNATION	–	BASE PINS	–
NOMINAL HEATER	6.3 V / 950 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 TravelingWave

No fixed ratings recorded.

Specialized microwave-device ratings are preserved densely in TUBE_SECTION_PARAMETER because the locked promoted columns do not directly represent beam/helix/collector/magnetron pulse ratings.

Medium-power TWT amplifier for radio-link communications, 5.925–6.425 GHz; conduction cooled.

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	5.925–6.425 GHz	—
Heater Current	800 mA–1.1 A	—
Saturated Output Power Minimum	25 W	—
Gain Minimum	37 dB	—
Helix Voltage	3.55–3.85 kV	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Helix Current Maximum	2 mA	—
Anode Voltage Maximum	2 kV	—
Anode Current Maximum	5 mA	—
Collector Voltage	2–2.5 kV	—
Collector Current Maximum	60 mA	—
Collector Dissipation Maximum	130 W	—
Drive Power Maximum	10 mW	—
Output Power Maximum	30 W	—
Warm-up Time Minimum	3 min	—
Typical Output Power	16 W	Frequency=6GHz

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes,
and their source documents.

