



ELECTRONIC TUBE REFERENCE

F4186

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRAVELINGWAVE

Wideband 5-11 GHz traveling-wave amplifier for electronic countermeasures, providing at least 50 dB gain and 2 watts saturated output.

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.

Wideband high-gain TWT amplifier, 5-11 GHz, designed for countermeasures systems; 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	5–11 GHz	—
Heater Current	800 mA–1 A	—
Saturated Output Power Minimum	2 W	—
Gain Minimum	50 dB	—
Helix Voltage	1.9–2.1 kV	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Helix Current Maximum	5 mA	—
Grid Voltage	-150–70 V	—
Collector Voltage	1.8–2.2 kV	—
Cathode Current Maximum	40 mA	—
Drive Power Maximum	1 W	—
Load VSWR Maximum	3 ratio	—
Warm-up Time Minimum	90 s	—
Typical Frequency	8 GHz	—
Typical Output Power	3.5 W	—
Typical Helix Voltage	1.98 kV	—