

ELECTRONIC TUBE REFERENCE

F4185

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TRAVELINGWAVE

Broadband 8-14 GHz traveling-wave amplifier for transportable and airborne equipment, providing at least 4 watts output and 40 dB gain.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 480 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1	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.	

Broadband TWT amplifier, 8-14 GHz, for transportable and airborne equipment; conduction/natural-convection 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	8–14 GHz	—
Heater Current	300 mA–600 mA	—
Output Power Minimum	4 W	—
Gain Minimum	40 dB	—
Helix Voltage	2.4–2.8 kV	—
Helix Current Maximum	2 mA	—
Anode Voltage	0.5–1 kV	—
Collector Voltage	1.2–1.6 kV	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Current Maximum	1 mA	—
Cathode Current Maximum	25 mA	—
Warm-up Time Minimum	3 min	—
Load VSWR Maximum	3 ratio	—
Typical Frequency	11 GHz	—
Typical Output Power	5.2 W	—
Typical Gain	45 dB	—