

ELECTRONIC TUBE REFERENCE

F4189

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TRAVELINGWAVE

Forced-air-cooled 1.3-2.1 GHz traveling-wave power amplifier for mobile radio links, providing at least 10 watts saturated output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 1.3 A	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, 1.3-2.1 GHz, for mobile radio-link communications; forced-air 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	1.3–2.1 GHz	—
Heater Current	1.1 A–1.5 A	—
Saturated Output Power Minimum	10 W	—
Saturation Gain Minimum	30 dB	—
Small Signal Gain Minimum	35 dB	—
Helix Voltage	1.2–1.6 kV	—
Anode Voltage	0.8–1.5 kV	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Helix Current Maximum	5.5 mA	—
Anode Current Maximum	3 mA	—
Cathode Current Maximum	57 mA	—
Collector Dissipation Maximum	100 W	—
Drive Power Maximum	100 mW	—
Load VSWR Maximum	2 ratio	—