

ELECTRONIC TUBE REFERENCE

F4156

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRAVELINGWAVE

Rugged ceramic-metal 11-18 GHz low-noise traveling-wave amplifier for military airborne equipment, offering about 40 dB gain.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 420 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.	

Wideband low-noise high-gain TWT, 11-18 GHz, specifically intended for military airborne applications; rugged ceramic-metal construction.

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
Heater Current	300 mA–800 mA	—
High Voltage Supply	1500 V	—
Current Supply	3.5 mA	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
High Voltage Supply Rated	1490–1510 V	—
High Voltage Supply Tube Life	1400–1600 V	—
Peak Input Power Maximum	1 kW	PulseDuration<50us
Average Input Power Maximum	0.1 W	—
Warm-up Time Minimum	120 s	—
Typical Heater Current	420 mA	—
Typical Cathode Current	430 uA	—
Typical Collector Current	420 uA	—
Typical Small Signal Gain	40 dB	Frequency=15GHz
Typical Saturated Output Power	5.4 mW	Frequency=15GHz