

ELECTRONIC TUBE REFERENCE

F4171A

Specialized - Microwave Tube electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

MICROWAVE

O-type carcinotron backward-wave oscillator covering approximately 12.4–18 GHz, with integral permanent magnet and forced-air cooling for broadband microwave generation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 1.15 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Microwave
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.

O-type carcinotron (backward-wave oscillator), 12.4–18 GHz; integral permanent magnet; 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 · Microwave

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Frequency Range	12.4–18 GHz	—
Heater Current	750 mA–1.8 A	—
Anode Current	-1–3 mA	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Voltage Maximum	250 V	—
Line Voltage Maximum	1600 V	—
Line Current Maximum	30 mA	—
Typical Frequency	18 GHz	—
Typical Line Voltage	1400 V	—
Typical Line Current	14.6 mA	—
Typical Anode Voltage	120 V	—
Typical Output Power	118 mW	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode-All-Electrodes Capacitance Maximum	30 pF	—
Line-All-Electrodes Capacitance Maximum	30 pF	—

TUBE TINKER

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

