



ELECTRONIC TUBE REFERENCE

F4053

Specialized - Microwave Tube electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
MICROWAVE

Electronically tunable O-type Carcinotron backward-wave oscillator covering approximately 7.0–12.4 GHz with integral permanent-magnet focusing and milliwatt-level output.

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

SECTION 1 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.

Electronically tunable O-type carcinotron backward-wave oscillator covering 7.0–12.4 GHz with integral permanent-magnet focusing.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1958 Compagnie General

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1958 COMPAGNIE GENERAL

Section 1 · Microwave

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
OperatingFrequencyMinimum	7 GHz	—
OperatingFrequencyMaximum	12.4 GHz	—
PowerOutputMinimum	15 mW	—
PowerOutputMaximum	300 mW	—
ElectronicTuning	1 boolean	—
Focusing	Integral permanent magnet	—

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	7–12.4 GHz	—
Heater Current	750 mA–1.8 A	—
Grid Voltage	-100 V	—
Anode Current	-1–3 mA	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Voltage Maximum	200 V	—
Line Voltage Maximum	1600 V	—
Line Current Maximum	30 mA	—
Warm-up Time Maximum	2 min	—
Typical Frequency	12.4 GHz	—
Typical Line Voltage	1310 V	—
Typical Line Current	13.5 mA	—
Typical Anode Voltage	130 V	—
Typical Output Power	100 mW	—

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