

ELECTRONIC TUBE REFERENCE

MCF1510

Specialized - Magnetron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

MAGNETRON

Fixed-frequency high-power pulsed magnetron designed for radar and related short-pulse microwave service in its specified operating band.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	13.75 V / 3.2 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Magnetron
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.

Highly stable fixed-tuned high-power pulsed magnetron near 9375 MHz; improved version of 4J50; 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 · Magnetron

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Frequency	9375 MHz	—
Frequency Tolerance	30 MHz	—
Pulse Voltage	20–23 kV	—
Peak Output Power Minimum	225 kW	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Surge Current Maximum	15 A	—
Warm-up Time Minimum	180 s	—
Pulse Duration	0.2–6 us	—
Duty Cycle Maximum	0.001	—
Rate of Rise of Voltage	60–160 kV/us	—
Repetition Rate	160–5000 Hz	—
Peak Input Power Maximum	630 kW	—
Average Input Power Maximum	630 W	—
Peak Anode Voltage Maximum	23 kV	—
Peak Anode Current Maximum	27.5 A	—
Typical RF Peak Output	235 kW	—