

ELECTRONIC TUBE REFERENCE

7461

Specialized - Magnetron electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
MAGNETRON

Mechanically tunable X-band pulsed magnetron producing roughly 60-120 W peak output, specifically designed for missile-beacon transponder environments.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	5 V / 650 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Magnetron
No fixed ratings recorded.
Published electrical section from 7461.pdf; identical repeated sections compressed when applicable.

Mechanically tunable pulsed magnetron oscillator delivering roughly 60-120 W peak output over 9300-9500 MHz, designed for missile-beacon transponder environments.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1938 Raytheon

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

1938 RAYTHEON

Section 1 · Magnetron

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
delivering a peak power output of 60 to	120 W	delivering a peak power output of 60 to 120 watts. It is capable of being
tuned to any frequency within the 9300 to	9500 MHz	tuned to any frequency within the 9300 to 9500 Mc range.
Heater Voltage – Preheat and Operate . 5.0 to	5.5 V	Heater Voltage — Preheat and Operate . 5.0 to 5.5 volts
Heater Current	650 mA	Heater Current . 0.65 Ampere at 5.0 Volts
at 15G, 20 to	2000 Hz	at 15G, 20 to 2000 cps . . 3.0/tp Mc, Max. Bandwidth
Pulse Duration . . 0.35 to	1 μs	Pulse Duration . . 0.35 to 1.0 Microseconds
Peak Anode Current	950 mA	Peak Anode Current . . 0.95 Amperes
Peak Anode Voltage 1.35 to	1.55 kV	Peak Anode Voltage 1.35 to 1.55 Kilovolts
Peak Power Output . . 60 to	120 W	Peak Power Output . . 60 to 120 Watts