

ELECTRONIC TUBE REFERENCE

6410

Specialized - Magnetron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
MAGNETRON

Fixed-frequency pulsed magnetron operating around 2.75–2.86 GHz with nominal five-megawatt peak output and forced-liquid cooling.

GENERAL CHARACTERISTICS

BASE DESIGNATION	–	BASE PINS	–
NOMINAL HEATER	8.3 V / 85 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Magnetron	
MAXIMUM PLATE VOLTAGE	76000 V
MAXIMUM CATHODE CURRENT	135 A
Published ratings and characteristics promoted semantically from source.	

Fixed-frequency pulsed magnetron around 2.75 to 2.86 GHz with nominal 5 MW peak output and forced-liquid cooling.



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

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater or filament voltage	8.3 V	Published nominal or representative value
Heater or filament current	85 A	Published nominal or representative value
Frequency range	2750–2860 MHz	Published operating or tuning range

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
RF power output	5000000 W	Published nominal or minimum output
Maximum pulse duration	2.2 us	Published pulse limit
Maximum duty cycle	0.001 fraction	Published duty-cycle limit



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1950 General Electric Transmitting Types

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

1950 GENERAL ELECTRIC TRANSMITTING TYPES

Section 1 · Magnetron

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	76000 V	—
Maximum Cathode Current	135 A	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Anode Voltage	71 kV	—
Peak Anode Current	130 A	—
Peak Power Output	4500 kW	—
X-Ray Shielding Note	Shielding may be necessary above 16 kV	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Frequency Minimum	2750 MHz	—
Frequency Maximum	2860 MHz	—