

ELECTRONIC TUBE REFERENCE

2J33

Specialized - Magnetron electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
MAGNETRON

Fixed-frequency pulsed magnetron oscillator operating around 8.76 GHz.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 15 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Magnetron	
MAXIMUM PLATE VOLTAGE	20000 V
MAXIMUM PLATE DISSIPATION	350 W
MAXIMUM CATHODE CURRENT	30 A
Published ratings and characteristics promoted where clearly stated.	

Fixed-frequency pulsed magnetron oscillator around 8.76 GHz.



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	6.3 V	Published nominal value
Heater or filament current	1.5 A	Published nominal value
Operating frequency	8760 MHz	Published nominal frequency
Magnetic field strength	1800 gauss	Published operating value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
RF power output	240 W	Published operating condition
Maximum anode voltage	22000 V	Published maximum or peak rating
Maximum anode current	30 A	Published peak rating
Maximum anode dissipation	350 W	Published rating



SOURCE OPERATING CONDITIONS

1971 English Electric Valve

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

1971 ENGLISH ELECTRIC VALVE

Section 1 · Magnetron

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Frequency range	2740–2780 MHz	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical peak output power	300 kW	Pulse
Typical peak anode voltage	20 kV	Pulse
Typical peak anode current	30 A	Pulse
Duty cycle	0.001	Pulse
Heater voltage	6.3 V	—
Heater current	15 A	—
Minimum cathode heating time	2 min	—
Magnetic field	1900 gauss	—