



ELECTRONIC TUBE REFERENCE

4J38

Specialized - Magnetron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
MAGNETRON

Pulsed magnetron oscillator covering approximately 3.55–3.60 GHz for high-peak-power microwave applications.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	16 V / 3.1 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Magnetron	
MAXIMUM PLATE VOLTAGE	30000 V
MAXIMUM PLATE DISSIPATION	1200 W
MAXIMUM CATHODE CURRENT	70 A
<i>Published ratings and characteristics promoted where clearly stated; identical repeated sections compressed when applicable.</i>	

Pulsed magnetron oscillator for the 3550–3600 MHz band.

SOURCE OPERATING CONDITIONS

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	16 V	Published nominal value
Heater or filament current	3.1 A	Published nominal value
Frequency range	3550–3600 MHz	Published operating band

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	1200 W	Published maximum rating
RF power output	1000 W	Published output condition
Pulse duration	2.5 us	Published pulse condition
Duty cycle	0.001 fraction	Published duty-cycle condition