



ELECTRONIC TUBE REFERENCE

2J35

Specialized - Magnetron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
MAGNETRON

Split-plate transit-time magnetron oscillator for approximately 10-centimeter operation, using stabilizing electrodes and producing about one watt RF output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	— / —	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Magnetron

No fixed ratings recorded.

Source-derived section; promoted values populated where applicable.

RMA Release # 324 @ 2J35 Feb. 12, 1943 MAGNETRON TRANSIT-TIME, SPLIT-PLATE TYPE WITH STABILIZING ELECTRODES D INTERNAL CIRCUIT Navelength of 10 cm approx. Filament Tungsten Voltage 1.8 a-c or d-c volts Current 2.0 amp. Overall Length 6-5/16" + 1/4" Seated Height 5-11/16" + 1/4" Maximum Diameter 1-7/16" Bulb T-10 Base Medium 4-Pin Mounting Position Any Naximum Ratings Are Absolute Values MAXIMUM RATINGS and TYPICAL OPERATING CONDITIONS D-C Plate Voltage 10 00 max. volts D-C Stabilizing-Electrode Voltage 7 50 max. volts D-C Plate Current 5 max. ma. D-C Stabilizing —Electrode Current 13 max. ma. Typical Operation at 10 cm approx.: Filament Voltage * 1.8 1.8 volts D-C Plate Voltage 900 1000 volts D-C Stabilizing-Electrode Voltage 550 6 50 volts D-C Plate Current 4 4 ma. D-C Stabilizing-Electrode Current 6 10 ma. Magnetic Field Intensity * 1300 1300 gaussses Power Output (approx.) 0.9 1 watt

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1940 RCA

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

1940 RCA

Section 1 · Magnetron

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Navelength of	10 cm	Navelength of 10 cm approx.
Voltage	1.8 V	Voltage 1.8 a-c or d-c volts
Current	2 A	Current 2.0 amp.
D-C Plate Voltage	0 V	D-C Plate Voltage 10 00 max. volts
D-C Stabilizing-Electrode Voltage	50 V	D-C Stabilizing-Electrode Voltage 7 50 max. volts
D-C Plate Current	5 mA	D-C Plate Current 5 max. ma.
D-C Stabilizing--Electrode Current	13 mA	D-C Stabilizing---Electrode Current 13 max. ma.
Typical Operation at	10 cm	Typical Operation at 10 cm approx.:
Filament Voltage *	1.8 V	Filament Voltage * 1.8 1.8 volts
D-C Plate Voltage	1000 V	D-C Plate Voltage 900 1000 volts
D-C Stabilizing-Electrode Voltage	50 V	D-C Stabilizing-Electrode Voltage 550 6 50 volts
D-C Plate Current	4 mA	D-C Plate Current 4 4 ma.
D-C Stabilizing-Electrode Current	10 mA	D-C Stabilizing-Electrode Current 6 10 ma.
Power Output (approx.)	1 W	Power Output (approx.) 0.9 1 watt