



ELECTRONIC TUBE REFERENCE

8543

Specialized - Magnetron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
MAGNETRON

Fixed-frequency high-power pulsed magnetron designed for radar and related short-pulse microwave service in its specified operating band.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 1.1 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Magnetron

No fixed ratings recorded.

Pulsed magnetron interaction structure.

The Sylvania 8543 is a rugged fixed-frequency X-band pulsed magnetron for airborne weather-radar systems.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1964 RMA EIA

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

1964 RMA EIA

Section 1 · Magnetron

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Preheat Voltage	6.3 V	—
Heater Current	1.1 A	—
Minimum Preheat Time	2 min	—
Frequency	9375 MHz	Nominal
Frequency Tolerance	30 MHz	PlusMinus
Peak RF Power Output Minimum	24 kW	—
Pulling Factor	16 MHz	—
Pushing Factor Maximum	0.2 MHz/A	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Peak Anode Voltage	9000 V	—
Maximum Duty Cycle	0.001 ratio	—
Maximum Pulse Width	2.2 us	—
Typical Peak Anode Voltage	8000 V	—
Average Power Output	30 W	—

TUBE TINKER

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and their source documents.

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