



ELECTRONIC TUBE REFERENCE

55008

Specialized - Magnetron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
MAGNETRON

High-power pulsed magnetron oscillator designed for radar and related short-pulse microwave applications at its specified operating frequency.

GENERAL CHARACTERISTICS

BASE DESIGNATION	Integral waveguide package	BASE PINS	—
NOMINAL HEATER	5 V / 3.9 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Magnetron	
MAXIMUM PLATE VOLTAGE	17000 V
MAXIMUM PLATE DISSIPATION	85 W
MAXIMUM CATHODE CURRENT	20 A
<i>Pulsed magnetron peak anode quantities mapped to closest promoted fields; pulse conditions retained as parameters.</i>	

Packaged pulsed magnetron for fixed-frequency operation in the 8.6 mm microwave band. Published data were interpreted from the complete supplied Philips datasheet, including ratings, characteristics, operating conditions, and construction notes.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1999 Philips 0-D

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

1999 PHILIPS 0-D

Section 1 · Magnetron

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Frequency range	34512–35208 Mc/s	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum pulse duration	0.5 usec	—
Maximum duty factor	0.0005	—
Maximum peak anode current	20 A	—
Maximum anode dissipation/input loss	85 W	—
Typical anode voltage	15–17 kV	—
Output power	70 kW	PulseDuration=0.5us
Output power	80 kW	PulseDuration=0.3us
Output power	75 kW	PulseDuration=0.1us
Output power	60 kW	PulseDuration=0.02us

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode-cathode capacitance	6 pF	—