

ELECTRONIC TUBE REFERENCE

55029

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	Packaged magnetron	BASE PINS	—
NOMINAL HEATER	13.75 V / 3.45 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Magnetron	
MAXIMUM PLATE VOLTAGE	23000 V
MAXIMUM PLATE DISSIPATION	635 W
MAXIMUM CATHODE CURRENT	30 A
X-band pulsed magnetron; peak anode quantities mapped to closest promoted fields; pulse-specific limits retained as parameters.	

Forced-air-cooled packaged X-band pulsed magnetron for high-power service. 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	9405–9505 Mc/s	—
Typical peak anode voltage	23 kV	—
Typical frequency pulling	17.5 Mc/s	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum pulse duration	1 usec	—
Maximum peak anode current	30 A	ShortPulse
Maximum anode input power	690 kW	ShortPulse
Maximum average input power	635 W	—
Minimum output power	225 kW	PulseDuration=1us
Minimum output power	90 kW	PulseDuration=0.25us
Minimum output power	34 kW	PulseDuration=0.1us

TUBE TINKER

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