



ELECTRONIC TUBE REFERENCE

Z319

Voltage - Pentode High Frequency (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Secondary-emitter high-slope pentode designed for wide-band RF amplification. Marconi documentation identifies its specialized secondary-emission construction as a means of obtaining substantial gain and bandwidth in high-frequency circuits.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	6.3 V / —	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	50000 Ω
TRANSCONDUCTANCE	0.019 S
MAXIMUM PLATE VOLTAGE	350 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	2.5 W
MAXIMUM SCREEN DISSIPATION	0.8 W

Secondary-emitter high-slope pentode for wide-band RF amplification.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1955 Marconi

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

1955 MARCONI

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/Filament Voltage	6.3 V	—
Transconductance	19000 μ S	—
Plate Resistance	50000 ohm	—
Equivalent noise resistance	5000 ohm	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum/Published Anode Voltage	350 V	—
Maximum/Published Screen Voltage	250 V	—
Maximum Anode Dissipation	2.5 W	—
Maximum Screen Dissipation	0.8 W	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-Anode Capacitance	0.003 pF	—
Input Capacitance	8 pF	—
Output Capacitance	3 pF	—

TUBE TINKER

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and their source documents.

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