



ELECTRONIC TUBE REFERENCE

ZA1

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Marconi acorn high-frequency pentode providing useful RF gain above 50 MHz and explicitly suitable as a suppressor-grid frequency changer. Its compact construction supports early VHF receiver and measurement applications.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	4 V / 250 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	100 V
<i>Acorn pentode. Approximate-data box gives 4.0 V / 0.25 A heater and 250 V anode / 100 V screen nominal ratings; published capacitances and HF operating point retained as parameters.</i>	

Marconi acorn pentode designed to maintain useful high-frequency gain above 50 Mc/s; also suitable as a suppressor-grid frequency changer or compact valve voltmeter.

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

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-Anode Capacitance	0.007 pF	—
Anode-AllOtherElectrodes Capacitance	3 pF	—
Grid-AllOtherElectrodes Capacitance	3 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Anode Voltage	250 V	HFAmplifier
Typical Screen Voltage	100 V	HFAmplifier
Typical Grid Voltage	-3 V	HFAmplifier
Typical Bias Resistance	1500 ohm	HFAmplifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HF Gain Frequency Threshold	50 MHz	Datasheet states useful HF gain above 50 Mc/s
Frequency Changer Service	1 boolean	SuppressorGridInjection
Valve Voltmeter Service	1 boolean	—

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