



ELECTRONIC TUBE REFERENCE

1K7G

Voltage - Pentode or Tetrode (with diode) electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS

CONSTRUCTION

DIODE-DIODE-PENTODE

Directly heated Radiotron dual-diode pentode, combining two signal detector diode plates with a pentode amplifier. Uses a 2 V, 120 mA coated filament and an eight-contact octal base.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	2 V / 120 mA	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	1250000 Ω
TRANSCONDUCTANCE	0.0008 S
MAXIMUM PLATE VOLTAGE	180 V
MAXIMUM SCREEN VOLTAGE	135 V
MAXIMUM PLATE DISSIPATION	0.35 W
MAXIMUM SCREEN DISSIPATION	0.07 W
Radiotron 1K7-G directly heated dual-diode pentode, 2 V 120 mA filament, eight-pin octal base. Pentode maxima: anode 180 V, screen 135 V, plate 0.35 W, screen 0.07 W. Typical gm 0.0008 S and rp 1.25 MΩ at plate 135 V, screen 67.5 V. Direct interelectrode capacitances grid-plate 0.015 pF, input 5.0 pF and output 10.5 pF. Two diode plates have distinct connections to opposite filament ends.	

SECTION2 Diode

No fixed ratings recorded.

First physical detector diode of directly heated Radiotron 1K7-G dual-diode pentode, 2.0 V 0.12 A coated filament. Manufacturer basing: diode plate No. 1 connected to pin 5 and aligned with the negative end of filament, not a common unipotential cathode. Individual diode maximum current and peak inverse voltage were not published in accessible datasheet; leave unknown ratings NULL. Second diode uses pin 4.

SECTION3 Diode

No fixed ratings recorded.

Second physical detector diode of directly heated Radiotron 1K7-G dual-diode pentode with coated 2.0 V 0.12 A filament. Plate No. 2 on pin 4 is associated with positive filament end; first diode plate No. 1 on pin 5 is at negative filament end. They are separate physical diode sections, without an assumed common cathode. Individual diode limits unspecified in manufacturer reference and remain NULL.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1946 Amalgamated Wireless

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

1946 AMALGAMATED WIRELESS

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	135 V	—
Screen Voltage	67.5 V	—
Grid Voltage	0 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input Capacitance	5 pF	—
Grid To Plate Capacitance	0.015 pF	—

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