

ELECTRONIC TUBE REFERENCE

6749

Voltage - Pentode Remote Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Remote- or semi-remote-cutoff pentode designed for RF, IF, variable-mu, or controlled-gain amplifier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7BK	BASE PINS	7
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

7BK - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – G1	A	G1 – Control Grid	CONNECTED
PIN2 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN2 – IS	A	IS – Internal Screen	CONNECTED
PIN3 – H	–	H – Heater	CONNECTED
PIN4 – H	–	H – Heater	CONNECTED
PIN5 – P	A	P – Plate (Anode)	CONNECTED
PIN6 – G2	A	G2 – Screen Grid	CONNECTED
PIN7 – K	A	K – Cathode	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	1000000 Ω
TRANSCONDUCTANCE	0.0044 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	150 V
<i>Published maximum ratings, representative operating conditions, and available capacitance/rectifier data reviewed.</i>	

6749 is listed in the supplied receiving-tube handbook as a remote-cutoff RF pentode. The published heater/filament rating is 6.3 V at 0.3 A. Maximum ratings, representative operating characteristics, and available special-service data were captured from the supplied table.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X General Electric Essential Characteristics

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

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	300 V	Published handbook rating
Maximum screen voltage	150 V	Published handbook rating
Plate voltage	250 V	ClassA
Screen voltage	100 V	ClassA
Plate current	11 mA	ClassA
Screen current	4.2 mA	ClassA
Alternate plate voltage	100 V	ClassA OperatingPoint2
Alternate screen voltage	100 V	ClassA OperatingPoint2
Alternate plate current	10.8 mA	ClassA OperatingPoint2
Alternate screen current	4.4 mA	ClassA OperatingPoint2

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	1000000 ohm	Published handbook characteristic
Transconductance	4400 μS	Published handbook characteristic
Heater/filament voltage	6.3 V	Published heater/filament rating
Heater/filament current	300 mA	Published heater/filament rating
Alternate plate resistance	250000 ohm	ClassA OperatingPoint2
Alternate transconductance	4300 μS	ClassA OperatingPoint2

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	5.5 pF	Published capacitance column

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Output capacitance	5.5 pF	Published capacitance column
Grid-to-plate capacitance	0.0035 pF	Published capacitance column

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and their source documents.

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