



ELECTRONIC TUBE REFERENCE

6691

Voltage - Pentode Sharp Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Sharp-cutoff RF pentode using a 6.3 V, 0.15 A heater. Manufacturer handbook data document fixed-gain high-frequency amplification with relatively low heater-current demand.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7BD	BASE PINS	7
NOMINAL HEATER	6.3 V / 150 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

7BD - 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
PIN2 – K	A	K – Cathode	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 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN7 – IS	A	IS – Internal Screen	CONNECTED
PIN7 – K	A	K – Cathode	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	500000 Ω
TRANSCONDUCTANCE	0.0051 S
MAXIMUM PLATE VOLTAGE	180 V
MAXIMUM SCREEN VOLTAGE	140 V
<i>Published maximum ratings, representative operating conditions, and available capacitance/rectifier data reviewed.</i>	

6691 is listed in the supplied receiving-tube handbook as a sharp-cutoff RF pentode. The published heater/filament rating is 6.3 V at 0.15 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	180 V	Published handbook rating
Maximum screen voltage	140 V	Published handbook rating
Plate voltage	180 V	ClassA
Screen voltage	120 V	ClassA
Plate current	7.7 mA	ClassA
Screen current	2.4 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	500000 ohm	Published handbook characteristic
Transconductance	5100 μ S	Published handbook characteristic
Heater/filament voltage	6.3 V	Published heater/filament rating
Heater/filament current	150 mA	Published heater/filament rating

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	4 pF	Published capacitance column
Output capacitance	2.8 pF	Published capacitance column
Grid-to-plate capacitance	0.02 pF	Published capacitance column

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

