

ELECTRONIC TUBE REFERENCE

6BW7

Voltage - Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

High-transconductance VHF pentode developed specifically for television IF and video-amplifier stages requiring wideband gain.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9AQ	BASE PINS	9
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

9AQ - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – K	A	K – Cathode	CONNECTED
PIN2 – G1	A	G1 – Control Grid	CONNECTED
PIN3 – K	A	K – Cathode	CONNECTED
PIN4 – H	–	H – Heater	CONNECTED
PIN5 – H	–	H – Heater	CONNECTED
PIN6 – IS	A	IS – Internal Screen	CONNECTED
PIN7 – P	A	P – Plate (Anode)	CONNECTED
PIN8 – G2	A	G2 – Screen Grid	CONNECTED
PIN9 – G3	A	G3 – Suppressor Grid	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	750000 Ω
TRANSCONDUCTANCE	0.0082 S
AMPLIFICATION FACTOR	70
MAXIMUM PLATE VOLTAGE	275 V
MAXIMUM SCREEN VOLTAGE	275 V
MAXIMUM PLATE DISSIPATION	2.75 W
MAXIMUM SCREEN DISSIPATION	1.2 W
<i>Published maximum ratings, operating characteristics, rectifier data, and capacitances reviewed.</i>	

VHF pentode for television IF and video amplifier stages.

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	275 V	Published handbook rating
Maximum screen voltage	275 V	Published handbook rating
Plate voltage	250 V	ClassA
Screen voltage	250 V	ClassA
Plate current	10 mA	ClassA
Screen current	3.7 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	750000 ohm	Published handbook characteristic
Transconductance	8200 μ S	Published handbook characteristic
Heater voltage	6.3 V	Published heater rating
Heater current	300 mA	Published heater rating

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	10 pF	Published capacitance column
Output capacitance	3.5 pF	Published capacitance column
Grid-to-plate capacitance	0.01 pF	Published capacitance column

1973 Mazda Valves Binder 2

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

1973 MAZDA VALVES BINDER 2

Section 1 · Pentode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	IF_VideoAmplifier text	—

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