

ELECTRONIC TUBE REFERENCE

6AU6WA

Voltage Pentode - Sharp Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Ruggedized 6AU6-family sharp-cutoff RF pentode for mobile, aeronautical, industrial, and vibration-prone equipment.

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	0.0052 S
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	165 V
MAXIMUM PLATE DISSIPATION	3.3 W
MAXIMUM SCREEN DISSIPATION	0.7 W
<i>Promoted from 250 V / 150 V Class A operating condition.</i>	

Ruggedized 6AU6-family fixed-slope pentode designed to withstand shock and vibration in mobile, aeronautical, and industrial equipment.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1958 Compagnie General

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

1958 COMPAGNIE GENERAL

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	300 mA	—
Transconductance	5200 μ S	PlateVoltage=250V; ScreenVoltage=150V
Plate Resistance	1000000 ohm	PlateVoltage=250V; ScreenVoltage=150V
Plate Current	10.6 mA	PlateVoltage=250V; ScreenVoltage=150V
Screen Current	4.3 mA	PlateVoltage=250V; ScreenVoltage=150V
Grid-to-Plate Capacitance	0.0035 pF	—
Input Capacitance	6 pF	—
Output Capacitance	4.9 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	ClassA
Screen Voltage	150 V	ClassA



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1960 RCA Industrial and Communications Types

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

1960 RCA INDUSTRIAL AND COMMUNICATIONS TYPES

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1961 Tung Sol

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

1961 TUNG SOL
Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	300 mA	—
Maximum shock	450 G/1msec	—
Maximum altitude	10000 ft	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid 1 to plate maximum	0.035 pF	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1968 Mazda Belvu

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

1968 MAZDA BELVU

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
'TEnSion filAment cerasrosrsrrenneesemescesseoscussoosecnuces VÊ	6.3 V	—
Heater current ... If	300 mA	—
AMmpoule	1 A	—
s4 vovoos vavovasesesnsecapeessrensacs VI	6.9 V	—
000s V	330 V	—
Tension d' allmentat10n de gr111€ n°2 Vâ;N	330 V	—
Tension de grill® n°2 es saccensarceameencecscenmensersesesses VZ	165 V	—
T'ension positive de grille n°01 VE;	0 V	—
se s006 c0nmos cncses sesesseuse s0 00eese PB	3.3 W	—
se eroconsessenseccunnceceenvesese es P'82	0.7 W	—
Tension entre le filamentetla cathode vorsssesceseseseessoc0so0ese VÊK	100 V	—
Tempétature de l'ampoule au point le plus chaud	165 ° C	—
Tension d'AN0dE crese sesavessescen ccveossesseosererss VA 100 250	250 V	—
Tension de grille n°2 _ ... ecevecrsermencecscocescrcrcenes VE2 100 125	150 V	—
srrr 1E 5,0 7,6	10.6 mA	—
Courant de grille n°2 _... eecerescrosvercassencencesess 1B3 2,1 3,0	4.3 mA	—
PEntE seressesseseeeensesoce ssoss0005 .S 3,9 45	52 mA/V	—
Plate resistance (envlron) arancomsesmescarvaserecese 0 0,5 1,5	1 MΩ	—
mesurée pour Vs =	2 Veff	—
R&:	100 kΩ	—
Rk 1,7 1,8 4	3.8 kΩ	—
Rg 400 500 900	1100 kΩ	—
vs 25 31 23	25 veff	—
Ra 100 240	510 kΩ	—
vs 47 60 44 53 38	44 Veff	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage Va	250 V	—
Résistance de Cathode eesssivrovscrennsecéremesvensecousees RE	330 Ω	—
Courant d'Anode@.....éuesssnassisisensanssen	12.2 mA	—
Transconductance	4.8 mA/V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Capacitance d'Entrée s ... Ce	6 pF	InterelectrodeCapacitance
Capacitance de@ S0ItI® ucremcrrssenseensmenceer Cs	4.9 pF	InterelectrodeCapacitance