



ELECTRONIC TUBE REFERENCE

6V5GT

Power - Beam (NOT sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

Beam pentode power tube designed for Class-A and Class-AB1 amplifier service, providing audio-frequency output in single-ended or push-pull circuits.

GENERAL CHARACTERISTICS

BASE DESIGNATION	6AD	BASE PINS	8
NOMINAL HEATER	6.3 V / 450 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

6AD - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – IS	A	IS – Internal Screen	CONNECTED
PIN2 – H	–	H – Heater	CONNECTED
PIN3 – HCT	–	HCT – Heater Center Tap	CONNECTED
PIN5 – P	A	P – Plate (Anode)	CONNECTED
PIN7 – H	–	H – Heater	CONNECTED
PIN8 – K	A	K – Cathode	CONNECTED

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	52000 Ω
TRANSCONDUCTANCE	0.0041 S
MAXIMUM PLATE VOLTAGE	315 V
MAXIMUM SCREEN VOLTAGE	285 V
MAXIMUM PLATE DISSIPATION	12 W
MAXIMUM SCREEN DISSIPATION	2 W
<i>Values promoted only where clearly published for this section in the approved source.</i>	

Beam pentode power tube for Class A and Class AB1 amplifier service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1938 National Union

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

1938 NATIONAL UNION

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (dc oF dC) cacicceccuacecaacccacacananacacs	6.3 Volts	Published source value; see source line context.
Maxinum Plate Voltage. ... i iuemicrceceiaaaaacnannaancnaen	315 Volts	Published source value; see source line context.
Mex imum Screen Voltage _i..e	285 Volts	Published source value; see source line context.
Heater Voltage....o.ooreeeeommccmcaeocacannn	6.3 Volts	Published source value; see source line context.
Plate Voltage. ... iieemmicannceann	180 Volts	Published source value; see source line context.
Screen Voltage. o oraiarnecenanannn	180 Volts	Published source value; see source line context.
Grid Voltage ¢ ... oot	-8.5 Volts	Published source value; see source line context.
Peak A-F Signal Voltage. coceoeo.o	8.5 Volts	Published source value; see source line context.
Max imum-Signal Plate Current	30 Ma	Published source value; see source line context.
Maximum-Signal Screen Current {(nominal)}	4 Ma	Published source value; see source line context.
Load Resistance. i,	5500 Ohms	Published source value; see source line context.
Power Output .. .eoeoo oo	2 Watts	Published source value; see source line context.
for the type	6 megohm	Published source value; see source line context.
and	0.1 megohm	Published source value; see source line context.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage ouoio i ccaamas	6.3 Volts	Published source value; see source line context.
Plate Voltage. ... ooeovmm it o oo o e	250 Volts	Published source value; see source line context.
Screen Voltage. oo oiuiioie e	250 Volts	Published source value; see source line context.
Grid Voltage oo oot e =	15 Volts	Published source value; see source line context.
Peak A-F Grid to Grid Voltage	30 Volts	Published source value; see source line context.
Maximum-Signal Screen Current {nominal)	13 Ma	Published source value; see source line context.
Effective Load Resistance (Plate to Plate)	8000 Ohms	Published source value; see source line context.
Power Output. T	10 Watts	Published source value; see source line context.

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate BResistance (qpproximate).-coeccavvoeoan	58000 Ohms	Published source value; see source line context.
Zero-Signal Plate Current	29 Ma	Published source value; see source line context.
Zero-Signal Screen Current (pnominal)	3 Ma	Published source value; see source line context.
Plate Resistance (approximate) o	60000 Ohms	Published source value; see source line context.
Transconductance. o	3750 umhos	Published source value; see source line context.
Zero-Signal Plate Current ... _ o oo oo	70 Ma	Published source value; see source line context.
Mexcimum-Signal Plate Current	92 Ma	Published source value; see source line context.



SOURCE DATA APPENDIX

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 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	315 V	ClassA
Screen-grid voltage	225 V	ClassA
Grid voltage	-13 V	ClassA
Plate current	34 mA	ClassA
Screen-grid current	2.2 mA	ClassA
Load resistance	8500 ohm	ClassA
Power output	5.5 W	ClassA
Plate voltage	250 V	ClassA;PlateVoltage=250V
Screen-grid voltage	250 V	ClassA;PlateVoltage=250V
Grid voltage	-12.5 V	ClassA;PlateVoltage=250V
Plate current	45 mA	ClassA;PlateVoltage=250V
Screen-grid current	4.5 mA	ClassA;PlateVoltage=250V
Load resistance	5000 ohm	ClassA;PlateVoltage=250V
Power output	4.5 W	ClassA;PlateVoltage=250V
Plate voltage	180 V	ClassA;PlateVoltage=180V
Screen-grid voltage	180 V	ClassA;PlateVoltage=180V
Grid voltage	-8.5 V	ClassA;PlateVoltage=180V
Plate current	29 mA	ClassA;PlateVoltage=180V
Screen-grid current	3 mA	ClassA;PlateVoltage=180V
Load resistance	5500 ohm	ClassA;PlateVoltage=180V
Power output	2 W	ClassA;PlateVoltage=180V

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	80000 ohm	ClassA;PlateVoltage=315V

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	3750 μS	ClassA;PlateVoltage=315V
Plate resistance	52000 ohm	ClassA;PlateVoltage=250V
Transconductance	4100 μS	ClassA;PlateVoltage=250V