

ELECTRONIC TUBE REFERENCE

25W6GT

Power - TV Vertical Output electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

Beam-power amplifier specifically designed as a television vertical-scanning output tube, with published operating data also covering triode-connected operation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7AC	BASE PINS	7
NOMINAL HEATER	25 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

7AC - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – Pin 1	–	–	NC · verified
PIN2 – Pin 2	–	H – Heater	CONNECTED · verified
PIN3 – Pin 3	A	P – Plate (Anode)	CONNECTED · verified
PIN4 – Pin 4	A	G2 – Screen Grid	CONNECTED · verified
PIN5 – Pin 5	A	G1 – Control Grid	CONNECTED · verified
PIN7 – Pin 7	–	H – Heater	CONNECTED · verified
PIN8 – Pin 8	A	BP – Beam-Forming Plate	CONNECTED · verified
PIN8 – Pin 8	A	K – Cathode	CONNECTED · verified

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	28000 Ω
TRANSCONDUCTANCE	0.008 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	10 W
MAXIMUM SCREEN DISSIPATION	1.25 W
MAXIMUM CATHODE CURRENT	60 mA
<i>Class-A promoted values use the 200-V operating column; alternate operating points and triode-connection data are preserved as parameters.</i>	

The 25W6GT is a beam pentode power amplifier designed specifically as a vertical-scanning output tube in television receivers and also has published triode-connected characteristics.

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 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	300 V	Published handbook rating
Maximum screen voltage	150 V	Published handbook rating
Plate voltage	200 V	ClassA
Screen voltage	125 V	ClassA
Control-grid bias	46 V	ClassA
Plate current	46 mA	ClassA
Screen current	2.2 mA	ClassA
Load resistance	4000 ohm	ClassA
Power output	3.8 W	ClassA
Triode-connected plate voltage	225 V	TriodeConnection VerticalDeflection
Triode-connected control-grid bias	30 V	TriodeConnection VerticalDeflection
Triode-connected plate current	22 mA	TriodeConnection VerticalDeflection
Maximum positive pulse plate voltage	1200 V	VerticalDeflection
Maximum plate dissipation	7.5 W	VerticalDeflection
Maximum DC cathode current	40 mA	VerticalDeflection
Alternate pentode plate voltage	110 V	PentodeConnection ClassA
Alternate pentode control-grid bias	7.5 V	PentodeConnection ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Alternate pentode plate current	49 mA	PentodeConnection ClassA
Alternate pentode screen current	4 mA	PentodeConnection ClassA
Alternate pentode load resistance	2000 ohm	PentodeConnection ClassA
Alternate pentode power output	2.1 W	PentodeConnection ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	28000 ohm	Published handbook characteristic
Transconductance	8000 μ S	Published handbook characteristic
Heater/filament voltage	25 V	Published heater/filament rating
Heater/filament current	300 mA	Published heater/filament rating
Triode-connected plate resistance	1600 ohm	TriodeConnection
Triode-connected transconductance	3800 μ S	TriodeConnection
Alternate pentode plate resistance	13000 ohm	PentodeConnection
Alternate pentode transconductance	8000 μ S	PentodeConnection



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 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	25 V	Nominal
Heater current	300 mA	Nominal

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum peak positive pulse plate voltage	1200 V	VerticalDeflection
Maximum peak negative grid 1 voltage	-250 V	VerticalDeflection
Maximum peak cathode current	140 mA	VerticalDeflection
Plate voltage	110 V	ClassA; OperatingPoint1
Plate voltage	200 V	ClassA; OperatingPoint2
Screen voltage	110 V	ClassA; OperatingPoint1
Screen voltage	125 V	ClassA; OperatingPoint2
Load resistance	2000 ohm	ClassA; OperatingPoint1
Load resistance	4000 ohm	ClassA; OperatingPoint2
Power output	2.1 W	ClassA; OperatingPoint1
Power output	3.8 W	ClassA; OperatingPoint2

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	13000 ohm	ClassA; OperatingPoint1
Plate resistance	28000 ohm	ClassA; OperatingPoint2
Transconductance	8000 uS	ClassA; OperatingPoint1
Transconductance	8000 uS	ClassA; OperatingPoint2
Amplification factor	6.2	TriodeConnection
Plate resistance	1600 ohm	TriodeConnection
Transconductance	3800 uS	TriodeConnection

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid 1 to plate	0.5 pF	Direct interelectrode capacitance
Input capacitance	15 pF	Direct interelectrode capacitance
Output capacitance	9 pF	Direct interelectrode capacitance



SOURCE DATA APPENDIX

1966 Tung Sol Electronic Tubes 3 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 3 OF 4

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	300 V	WholeTube
Maximum screen voltage	150 V	WholeTube
Maximum plate dissipation	10 W	WholeTube
Maximum screen dissipation	1.25 W	WholeTube
Plate voltage	110 V	ClassA1
Screen voltage	110 V	ClassA1
Plate resistance	13000 ohm	ClassA1
Transconductance	8000 μ S	ClassA1
Power output	2.1 W	ClassA1



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	13000 ohm	ClassA;Ep=110V
Plate Resistance Triode Connection	1600 ohm	TriodeConnection
Transconductance Triode Connection	3800 μ S	TriodeConnection
Amplification Factor Triode Connection	6.2	TriodeConnection

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	110 V	ClassA
Screen Voltage	110 V	ClassA
Power Output	2.1 W	ClassA