

ELECTRONIC TUBE REFERENCE

25DT5

Power - TV Vertical Output electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
BEAMPOWER

Miniature beam-power pentode specifically designed for television vertical-deflection output service, with controlled heater warm-up and pulse-voltage ratings for scanning operation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9HN	BASE PINS	9
NOMINAL HEATER	25 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

9HN - TERMINAL PINOUT

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

SECTION RATINGS

SECTION1 Beam Power	
TRANSCONDUCTANCE	0.0062 S
MAXIMUM PLATE VOLTAGE	315 V
MAXIMUM SCREEN VOLTAGE	285 V
MAXIMUM PLATE DISSIPATION	9 W
MAXIMUM SCREEN DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	55 mA
<i>Published ratings and characteristics promoted from the approved source.</i>	

The 25DT5 is a 9-pin miniature beam power pentode designed for vertical-deflection output service in television receivers, with controlled heater warm-up and pulse-voltage ratings for scanning operation.



SOURCE OPERATING CONDITIONS

1950 Sylvania

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

1950 SYLVANIA

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Positive Pulse Plate Voltage	2200 V	Absolute maximum
Peak Cathode Current	190 mA	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	44 mA	250 V plate and screen

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-Plate Capacitance	0.57 pF	—



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	2200 V	HorizontalDeflection
Maximum peak cathode current	190 mA	HorizontalDeflection
Maximum peak negative pulse grid 1 voltage	-250 V	VerticalDeflection
Plate voltage	60 V	Typical operating conditions; OperatingPoint1
Plate voltage	80 V	Typical operating conditions; OperatingPoint2
Plate voltage	250 V	Typical operating conditions; OperatingPoint3
Screen voltage	150 V	Typical operating conditions; OperatingPoint1
Screen voltage	250 V	Typical operating conditions; OperatingPoint2
Screen voltage	250 V	Typical operating conditions; OperatingPoint3
Grid 1 voltage	0 V	Typical operating conditions; OperatingPoint1
Grid 1 voltage	0 V	Typical operating conditions; OperatingPoint2
Grid 1 voltage	-16.5 V	Typical operating conditions; OperatingPoint3

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater warm-up time	11 s	ControlledWarmup
Transconductance	6200 uS	OperatingPoint3

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid 1 to plate	0.57 pF	Direct interelectrode capacitance
Input capacitance	12.5 pF	Direct interelectrode capacitance
Output capacitance	4.9 pF	Direct interelectrode capacitance



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

1966 Tung Sol Electronic Tubes 3 of 4

[SOURCE PDF](#)

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

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	25 V	TypicalOperation
Heater current	300 mA	TypicalOperation
Maximum positive pulse plate voltage	2200 V	VerticalDeflection
Maximum average cathode current	55 mA	WholeTube
Maximum peak cathode current	190 mA	WholeTube
Heater warm-up time	17 s	WholeTube
Plate voltage	250 V	TypicalOperation
Screen voltage	250 V	TypicalOperation
Transconductance	6000 μS	TypicalOperation