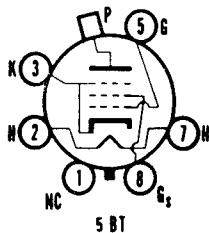


SYLVANIA TYPE 6DN6 25DN6

BEAM POWER AMPLIFIER



MECHANICAL DATA

Bulb.....	T-12
Base.....	B8-118, Short Medium Shell Octal, 8-Pin
Outline.....	12-21
Basing.....	5BT
Top Cap.....	C1-1 Small
Cathode.....	Coated Unipotential
Mounting Position.....	Vertical ¹

ELECTRICAL DATA

HEATER CHARACTERISTICS

	6DN6	25DN6	
Heater Voltage.....	6.3	25.0	Volts
Heater Current.....	2.5	0.60	Amperes
Heater Warm-up Time (See Appendix).....		11	Seconds
Heater-Cathode Voltage (Design Center Values)			
Heater Negative with Respect to Cathode			
Total D C and Peak.....	200	200	Volts Max.
Heater Positive with Respect to Cathode			
D C.....	100	100	Volts Max.
Total D C and Peak.....	200	200	Volts Max.

DIRECT INTERELECTRODE CAPACITANCES (Approx.)

Grid No. 1 to Plate.....	0.8	μmf
Input.....	22	μmf
Output.....	11.5	μmf

RATINGS (Design Center Values—Except as Noted)

Horizontal Deflection Amplifier²

D C Plate Supply Voltage (Boost + D C Power Supply).....	700	Volts Max.
Peak Positive Pulse Plate Voltage (Abs. Max.).....	6600	Volts
Peak Negative Pulse Plate Voltage.....	1500	Volts Max.
Plate Dissipation ³	15	Watts Max.
Peak Negative Grid No. 1 Voltage.....	200	Volts Max.
D C Grid No. 2 Voltage.....	175	Volts Max.
Grid No. 2 Dissipation.....	3.0	Watts Max.
Average Cathode Current.....	200	Ma Max.
Peak Cathode Current.....	700	Ma Max.
Grid No. 1 Circuit Resistance.....	0.47	Megohm Max.
Bulb Temperature (At Hottest Point).....	225°	C Max

AVERAGE CHARACTERISTICS

Pentode Operation:

With $E_b = 125$ V, $E_{c2} = 125$ V and $E_{c1} = -18$ V	
Plate Current.....	70 Ma
Grid No. 2 Current.....	6.3 Ma
Transconductance.....	9000 μmhos
Plate Resistance (approx.).....	4000 Ohms

Zero Bias:

With $E_b = 50$ V, $E_{c2} = 100$ V and $E_{c1} = 0$ V (Instantaneous Values)	
Plate Current.....	240 Ma
Grid No. 2 Current.....	30 Ma

Cutoff:

For $I_b = 0.5$ Ma with $E_b = 125$ V and $E_{c2} = 125$ V	
Grid No. 1 Voltage (approx.).....	-36 Volts

Triode Amplification Factor:

With $E_b = E_{c2} = 125$ V and $E_{c3} = -18$ V.....	4.35
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NOTES:

- Horizontal operation permitted if plane of Pins 1 and 3 is vertical.
- For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcasting Stations; Federal Communications Commission." The duty cycle of the voltage pulse must not exceed 15% of one scanning cycle.
- In stages operating with grid leak bias, an adequate cathode bias resistor or other suitable means is required to protect the tube in the absence of excitation.

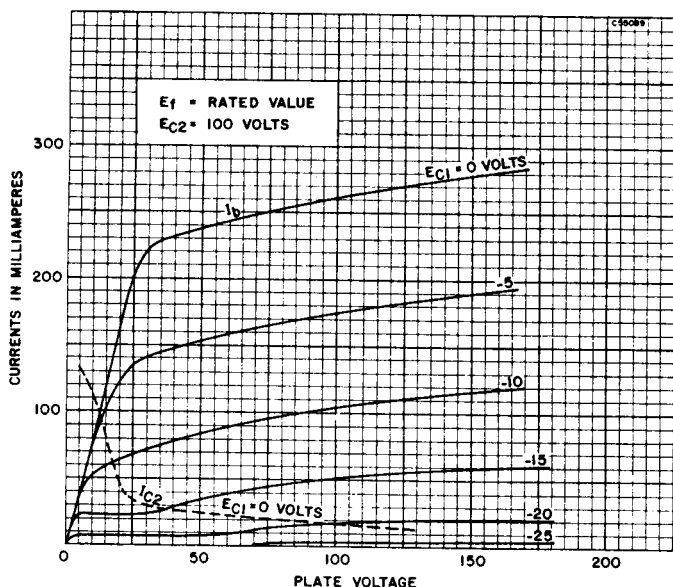
6DN6, 25DN6 (Cont'd)

APPLICATION

The Sylvania Types 6DN6 and 25DN6 are beam power amplifiers designed for use as horizontal deflection amplifiers in television receivers having low B supply voltages. These types exhibit extremely low plate knee characteristics at zero bias.

The 25DN6 features a 25.0 volt, 600 Ma heater and controlled heater warm-up time for series string operation. Except for heater characteristics, the 25DN6 is identical to the 6DN6.

AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS

