



25DN6

BEAM POWER TUBE

Intended for use in equipment having series heater-string arrangement

25DN6

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage.	25	ac or dc volts
Current.	0.6	amp
Warm-up time (Average)	11	sec

For definition of heater warm-up time and method of determining it, see sheet HEATER WARM-UP TIME MEASUREMENT at front of this Section.

Direct Interelectrode Capacitances (Approx.):^o

Grid No.1 to plate	0.8	μf
Grid No.1 to cathode & grid No.3, grid No.2, and heater.	22	μf
Plate to cathode & grid No.3, grid No.2, and heater	11.5	μf

Characteristics, Class A₁ Amplifier:

Plate Voltage.	50	125	volts
Grid-No.2 (Screen-Grid) Voltage.	100	125	volts
Grid-No.1 (Control-Grid) Voltage	0	-18	volts
Mu Factor, Grid No.2 to Grid No.1.	-	4.35	
Plate Resistance (Approx.)	-	4000	ohms
Transconductance	-	9000	μmhos
Plate Current.	240*	70	ma
Grid-No.2 Current.	30*	6.3	ma
Grid-No.1 Voltage (Approx.) for plate current of 0.5 ma.	-	-36	volts

Mechanical:

Operating Position Vertical, base up or down, or Horizontal with pins 1 and 3 in vertical plane

Maximum Overall Length 5"

Seated Length. 4-1/4" ± 3/16"

Maximum Diameter 1-9/16"

Bulb T12

Cap. Small (JETEC No.C1-1)

Base Short Medium-Shell Octal 8-Pin with External Barriers, Style B (JETEC No.B8-118)

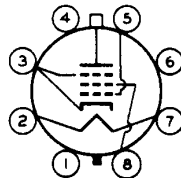
Basing Designation for BOTTOM VIEW 5BT

Pin 1 - No Connection

Pin 2 - Heater

Pin 3 - Cathode, Grid No.3

Pin 4 - No Connection



Pin 5 - Grid No.1

Pin 6 - No Connection

Pin 7 - Heater

Pin 8 - Grid No.2

Cap - Plate

^o,*: See next page.

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HORIZONTAL DEFLECTION AMPLIFIER

Maximum Ratings, Design-Center Values Except as Noted:

For operation in a 525-line, 30-frame system[□]

DC PLATE VOLTAGE	700 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE (Absolute maximum) [⊕]	6600 [■] max.	volts
PEAK NEGATIVE-PULSE PLATE VOLTAGE	1500 max.	volts
DC GRID-No.2 (SCREEN-GRID) VOLTAGE	175 max.	volts
PEAK NEGATIVE-PULSE GRID-No.1 VOLTAGE	200 max.	volts
CATHODE CURRENT:		
Peak	700 max.	ma
Average	200 max.	ma
GRID-No.2 INPUT	3 max.	watts
PLATE DISSIPATION [†]	15 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	200 max.	volts
Heater positive with respect to cathode	200 [▲] max.	volts
BULB TEMPERATURE (At hottest point on bulb surface)	225 max.	°C

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:
For grid-resistor-bias operation[†] 0.47 max. megohm

- [□] Without external shield.
- * These values can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.
- [□] As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission.
- [⊕] This rating is applicable when the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.
- [■] Under no circumstances should this absolute value be exceeded.
- [†] It is essential that the plate dissipation be limited in the event of loss of grid-No.1 signal. For this purpose, some protective means such as a cathode resistor of suitable value should be employed.
- [▲] The dc component must not exceed 100 volts.



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