



12BV7

SHARP-CUTOFF PENTODE

9-PIN MINIATURE TYPE

12BV7

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Heater arrangement	Series	Parallel	
Voltage	12.6	6.3	ac or dc volts
Current	0.3	0.6	amp

Direct Interelectrode Capacitances (Approx.):^o

Grid No.1 to plate.	0.055	μf
Grid No.1 to cathode, grid No.3 & internal shield, grid No.2, and heater	11	μf
Plate to cathode, grid No.3 & internal shield, grid No.2, and heater	3	μf

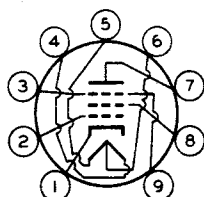
Characteristics, Class A₁ Amplifier:

Plate Voltage	250	250	volts
Grid No.3 (Suppressor Grid)	Connected to cathode at socket		
Grid-No.2 (Screen-Grid)			
Voltage	180	150	volts
Grid-No.1 (Control-Grid) Voltage	-8	-	volts
Cathode Resistor.	-	68	ohms
Plate Resistance (Approx.)	-	85000	ohms
Transconductance.	-	13000	μmhos
Plate Current	0.5 [†]	27	ma
Grid-No.2 Current	-	6	ma
Grid-No.1 Voltage (Approx.) for plate current of 20 μamp	-	-12	volts

Mechanical:

Mounting Position	Any
Maximum Overall Length	2-5/8"
Maximum Seated Length	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip).	2" $\pm$ 3/32"
Maximum Diameter.	7/8"
Dimensional Outline	See General Section
Bulb.	T6-1/2
Base.	Small-Button Noval 9-Pin (JETEC No.E9-1)
Basing Designation for BOTTOM VIEW.	9BF

Pin 1 - Cathode
 Pin 2 - Grid No.1
 Pin 3 - Grid No.3,
 Internal
 Shield
 Pin 4 - Heater
 Pin 5 - Heater



Pin 6 - Heater
 Mid-tap
 Pin 7 - Plate
 Pin 8 - Grid No.2
 Pin 9 - Grid No.3,
 Internal
 Shield

^o Without external shield.[†] Minimum value.

12BV7



12BV7

SHARP-CUTOFF PENTODE

AMPLIFIER - Class A₁

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE.	300	max.	volts
GRID-No.3 (SUPPRESSOR-GRID) VOLTAGE.	0	max.	volts
GRID-No.2 (SCREEN-GRID) VOLTAGE.	175	max.	volts
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Negative bias value.	50	max.	volts
GRID-No.2 INPUT.	1	max.	watt
PLATE DISSIPATION.	6.25	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode .	200	max.	volts
Heater positive with respect to cathode .	200 [▲]	max.	volts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For fixed-bias operation	0.25	max.	megohm
For cathode-bias operation	1.0	max.	megohm

[▲] The dc component must not exceed 100 volts.