

Sharp-Cutoff Pentode

7-PIN MINIATURE TYPE

With Heater Having Controlled Warm-Up Time

GENERAL DATA

Electrical:

Heater Characteristics and Ratings (*Design-Maximum Values*):

Voltage (AC or DC)	6.3 ^a	6.3 ± 0.6	volts
Current	0.450 ± 0.030	0.450 ^b	amp
Warm-up time (Average)	11	-	sec
Peak heater-cathode voltage:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200 ^c	max.	volts
Direct Interelectrode Capacitances: ^d			
Grid No.1 to plate	0.006	max.	μf
Grid No.1 to cathode, grid No.3 & internal shield, grid No.2, and heater	8.8		μf
Plate to cathode, grid No.3 & internal shield, grid No.2, and heater	5.2		μf

Characteristics, Class A₁ Amplifier:

Plate Supply Voltage	75	150	volts
Grid No.3	Connected to cathode at socket		
Grid-No.2 Supply Voltage	75	75	volts
Grid-No.1 Supply Voltage	0	0	volts
Cathode Resistor	68	68	ohms
Amplification Factor ^e	50	-	
Plate Resistance (Approx.)	-	0.5	megohm
Transconductance	-	9500	μhos
Plate Current	-	8.8	ma
Grid-No.2 Current	-	2.8	ma
Grid-No.1 Voltage (Approx.) for plate μa = 20	-	-4	volts

Mechanical:

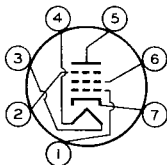
Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	2-1/8"
Maximum Seated Length	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip)	1-1/2" ± 3/32"
Diameter	0.650" to 0.750"
Dimensional Outline	See <i>General Section</i>
Bulb	T5-1/2
Base	Small-Button Miniature 7-Pin (JEDEC No.E7-1)



6HS6

Basing Designation for BOTTOM VIEW. 7BK

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



Pin 4 - Heater
Pin 5 - Plate
Pin 6 - Grid No.2
Pin 7 - Cathode

AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE.	300 max.	volts
GRID No.3 (SUPPRESSOR GRID). . .	<i>Connect to cathode at socket</i>	
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE	300 max.	volts
GRID-No.2 VOLTAGE.	See <i>Grid-No.2 Input Rating</i> <i>Chart at front of Receiving Tube Section</i>	
GRID-No.1 (CONTROL-GRID) VOLTAGE:		
Negative-bias value.	50 max.	volts
Positive-bias value.	0 max.	volts
GRID-No.2 INPUT:		
For grid-No.2 voltages up to 150 volts .	1 max.	watt
For grid-No.2 voltages between 150 and 300 volts.	See <i>Grid-No.2 Input Rating</i> <i>Chart at front of Receiving Tube Section</i>	
PLATE DISSIPATION.	3 max.	watts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:		
For fixed-bias operation	0.5 max.	megohm
For cathode-bias operation	1 max.	megohm

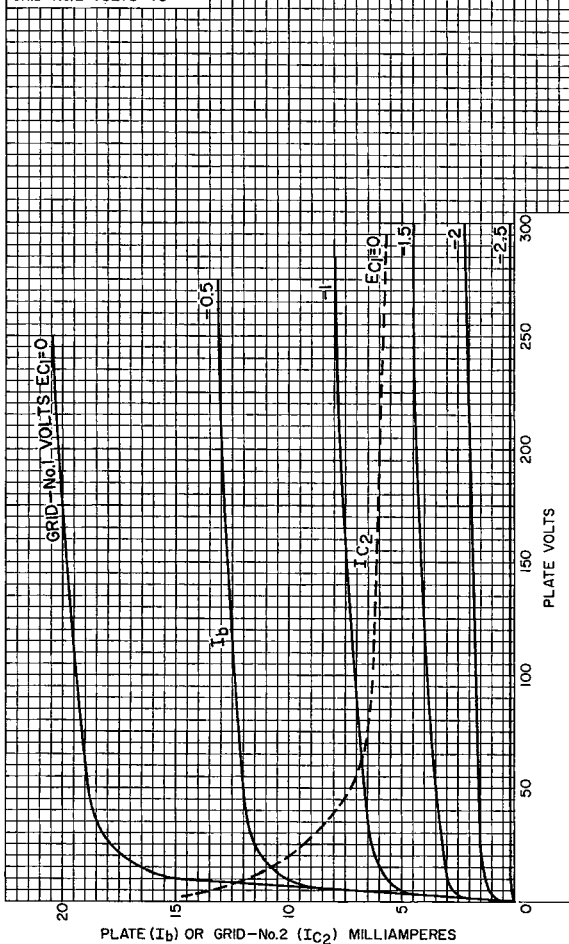
- ^a At heater amperes = 0.450.
- ^b At heater volts = 6.3.
- ^c The dc component must not exceed 100 volts.
- ^d Without external shield.
- ^e Triode connection (Grid No.2 connected to plate).



AVERAGE CHARACTERISTICS

 $E_f = 6.3$ VOLTSGRID No.3 CONNECTED TO
CATHODE AT SOCKET.

GRID-No.2 VOLTS = 75

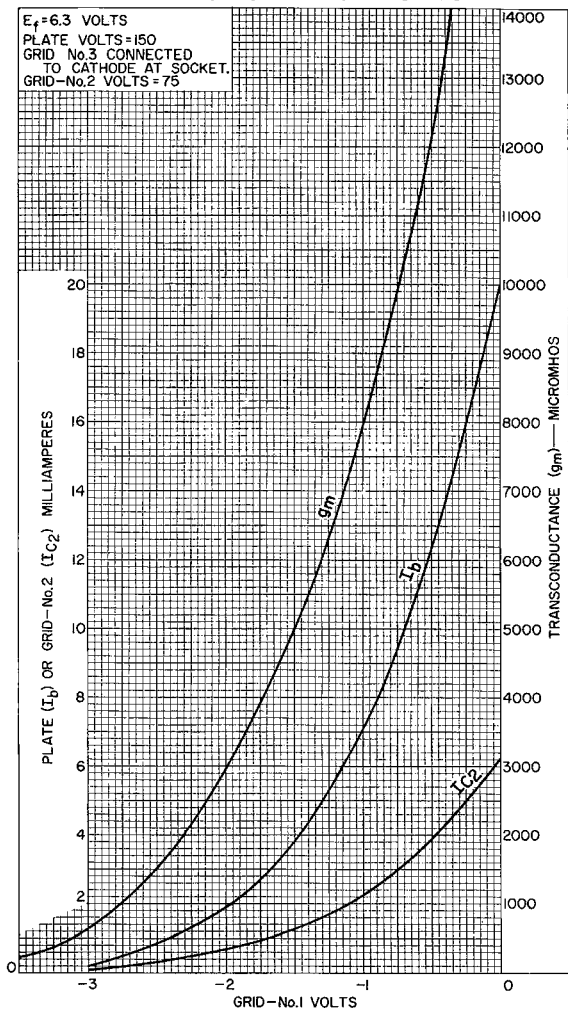


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AVERAGE CHARACTERISTICS



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