



6CB6-A

6CB6-A

SHARP-CUTOFF PENTODE

7-PIN MINIATURE TYPE

With heater having controlled warm-up time

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage.	6.3	ac or dc volts
Current.	0.3 ± 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:

	<i>Without External Shield</i>	<i>With External Shield^o</i>	
Grid No.1 to plate.	0.025 max.	0.015 max.	μf
Grid No.1 to cathode & internal shield & grid No.3, grid No.2, and heater.	6.5	6.5	μf
Plate to cathode & internal shield & grid No.3, grid No.2, and heater.	2	3	μf

Characteristics, Class A₁ Amplifier:

Plate-Supply Voltage.	125	125	volts
Grid No.3	♦	♦	
Grid-No.2 Supply Voltage.	125	125	volts
Grid-No.1 Voltage	-3	-	volts
Cathode Resistor.	-	56	ohms
Plate Resistance (Approx.).	-	0.28	megohm
Transconductance.	-	8000	μmhos
Plate Current	2.8	13	ma
Grid-No.2 Current	-	3.7	ma
Grid-No.1 Voltage (Approx.) for plate μa = 20	-	-6.5	volts

Mechanical:

Operating Position.	Any
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	<i>See General Section</i>
Bulb.	T5-1/2
Base.	Small-Button Miniature 7-Pin (JEDEC No.E7-1)

^o, ♦: See next page.

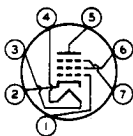


6CB6-A

SHARP-CUTOFF PENTODE

Basing Designation for Bottom View. 7CM

Pin 1 - Grid No.1
 Pin 2 - Cathode
 Pin 3 - Heater
 Pin 4 - Heater
 Pin 5 - Plate



Pin 6 - Grid No.2
 Pin 7 - Grid No.3,
 Internal
 Shield

AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE	330 max.	volts
GRID-No.3 (SUPPRESSOR-GRID) VOLTAGE . .	0 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE.	330 max.	volts
GRID-No.2 VOLTAGE	See Grid-No.2 Input	

Rating Chart at front of Receiving Tube Section

GRID-No.1 (CONTROL-GRID) VOLTAGE:

Positive-bias value 0 max. volts

GRID-No.2 INPUT:

For grid-No.2 voltages up

to 165 volts. 0.55 max. watt

For grid-No.2 voltages be-

tween 165 and 330 volts See Grid-No.2 Input

Rating Chart at front of Receiving Tube Section

PLATE DISSIPATION 2.3 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 max. megohm

○ with external shield JEDEC No.316 connected to cathode.

◆ connected to cathode at socket.

▲ The dc component must not exceed 100 volts.

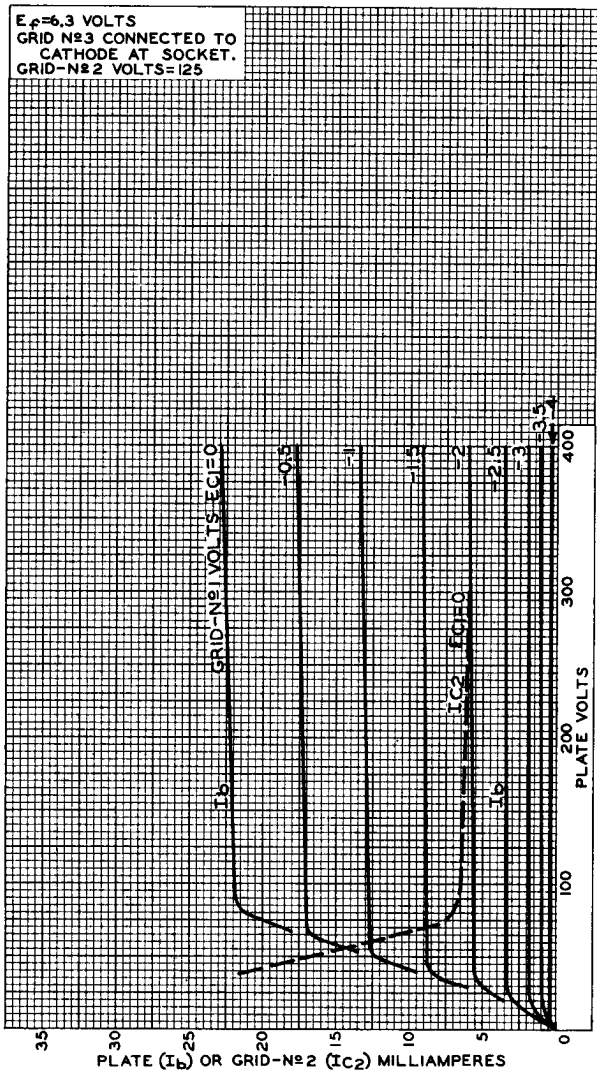


6CB6-A

6CB6-A

AVERAGE CHARACTERISTICS

$E_p = 6.3$ VOLTS
GRID N \circ 3 CONNECTED TO
CATHODE AT SOCKET.
GRID-N \circ 2 VOLTS = 125



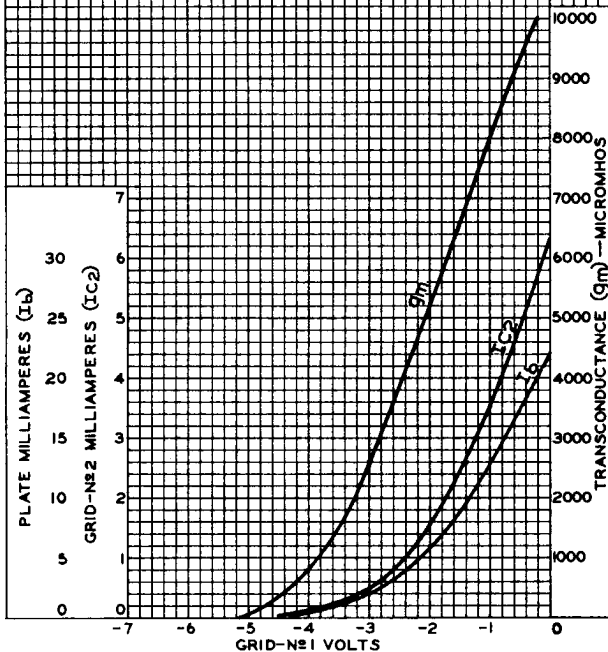
6CB6-A



6CB6-A

AVERAGE CHARACTERISTICS

$E_f = 6.3$ VOLTS
 PLATE VOLTS = 125
 GRID N°3 CONNECTED TO
 CATHODE AT SOCKET.
 GRID-N°2 VOLTS = 125



ELECTRON TUBE DIVISION

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-9853