

Sharp-Cutoff Pentode

7-PIN MINIATURE TYPE

With Heater Having Controlled Warm-Up Time

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

| | | |
|----------------------------------|----------|-------|
| Voltage (AC or DC) | 18 | volts |
| Current | 0.1 ± 6% | amp |
| Warm-up time (Average) | 20 | sec |

Direct Interelectrode Capacitances:

| | <i>Without External Shield</i> | <i>With External Shield^a</i> | |
|--|--|---|----|
| Grid No.1 to plate. | 0.0035 max. | 0.0035 max. | μf |
| Grid No.1 to cathode, grid No.3 & internal shield, grid No.2, and heater. | 6 | 6 | μf |
| Plate to cathode, grid No.3 & internal shield, grid No.2, and heater. | 5 | 5 | μf |

Characteristics, Class A₁ Amplifier:

| | | |
|--|---------------------------------------|--------|
| Plate Supply Voltage. | 100 | volts |
| Grid No.3 | <i>Connected to cathode at socket</i> | |
| Grid-No.2 Supply Voltage. | 100 | volts |
| Cathode Resistor. | 150 | ohms |
| Plate Resistance (Approx.) | 0.5 | megohm |
| Transconductance. | 4300 | μmhos |
| Plate Current | 5 | ma |
| Grid-No.2 Current | 2 | ma |
| Grid-No.1 Voltage (Approx.) for plate μa = 10 | -4.7 | volts |

Mechanical:

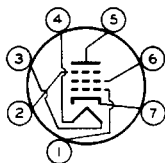
| | |
|---|--|
| Operating Position. | Any |
| Maximum Overall Length. | 2-1/8" |
| Maximum Seated Length | 1-7/8" |
| Length, Base Seat to Bulb Top (Excluding tip) | 1-1/2" ± 3/32" |
| Diameter. | 0.650" to 0.750" |
| Dimensional Outline | See <i>General Section</i> |
| Bulb. | T5-1/2 |
| Base. | Small-Button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



18GD6A

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

RF AMPLIFIER and AUTODYNE CONVERTER

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE 150 max. volts
GRID No.3 (SUPPRESSOR GRID) . . .Connect to cathode at socket
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE. . . . 150 max. volts
GRID-No.2 VOLTAGESee *Grid-No.2 Input Rating*
Chart at front of Receiving Tube Section

GRID-No.2 INPUT:

For grid-No.2 voltages up to 75 volts . . . 0.6 max. watt
For grid-No.2 voltages between
75 and 150 volts.See *Grid-No.2 Input Rating*
Chart at front of Receiving Tube Section

PLATE DISSIPATION 2.5 max. watts

PEAK HEATER-CATHODE VOLTAGE:

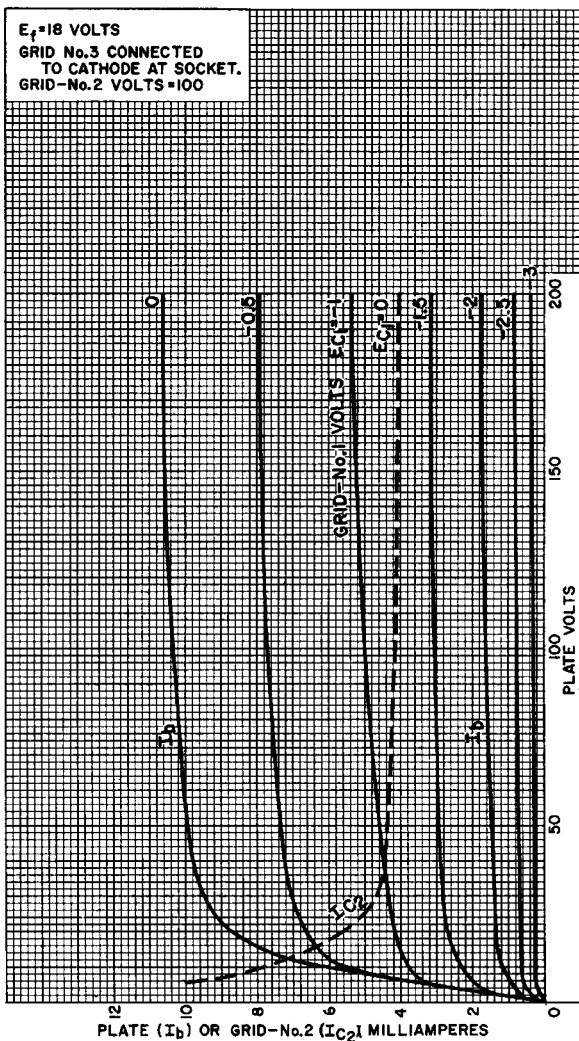
Heater negative with respect to cathode . . 100 max. volts
Heater positive with respect to cathode . . 100 max. volts

^a With external shield JEDEC No.316 connected to cathode.



AVERAGE CHARACTERISTICS

$E_f = 18$ VOLTS
 GRID No.3 CONNECTED
 TO CATHODE AT SOCKET.
 GRID-No.2 VOLTS = 100

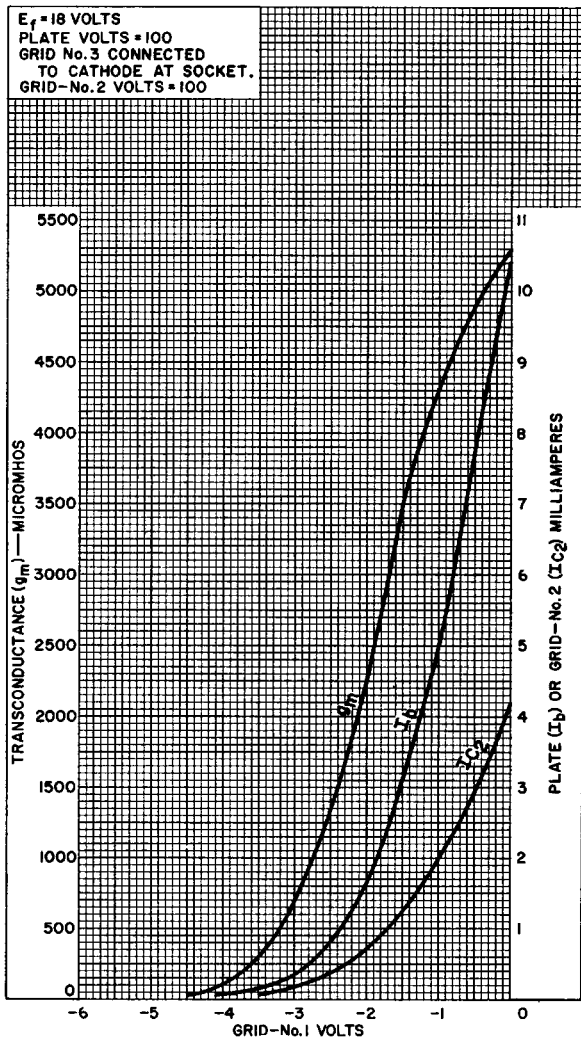


92CM-11138R1



18GD6A

AVERAGE CHARACTERISTICS



92CM-11136R1

