

Diode—Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

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

Voltage (AC or DC) 6.3 ± 0.6 volts

Current at heater volts = 6.3 0.300 amp

Peak heater-cathode voltage:

Heater negative with respect to cathode 200 max. volts

Heater positive with respect to cathode 200^a max. volts

Direct Interelectrode Capacitances:^b

Pentode Unit:

Grid No.1 to plate 0.002 max. μf

Grid No.1 to cathode, grid No.3, grid No.2, internal shield, and heater 6.0 μf

Plate to cathode, grid No.3, grid No.2, internal shield, and heater 5.0 μf

Pentode grid No.1 to diode plate 0.0015 max. μf

Pentode plate to diode plate 0.09 μf

Characteristics, Class A₁ Amplifier (Pentode Unit):

Plate Voltage 100 volts

Grid No.3 *Connected to cathode at socket*

Grid-No.2 Voltage 100 volts

Grid-No.1 Supply Voltage 0 volts

Grid-No.1 Resistor (Bypassed) 2.2 megohms

Plate Resistance (Approx.) 0.55 megohm

Transconductance 4300 μmhos

Plate Current 5.5 ma

Grid-No.2 Current 2.2 ma

Grid-No.1 Voltage (Approx.) for plate $\mu\text{a} = 10$ -4.2 volts

Mechanical:

Operating 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"

Diameter 0.750" to 0.875"

Dimensional Outline See *General Section*

Bulb T6-1/2

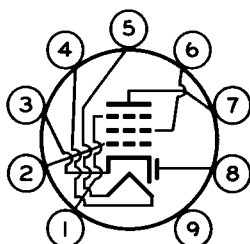
Base Small-Button Noval 9-Pin (JEDEC No.E9-1)



6KL8

Basing Designation for BOTTOM VIEW. 9LQ

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



Pin 6 - Pentode
Grid No.2
Pin 7 - Pentode
Plate
Pin 8 - Diode Plate
Pin 9 - Internal
Shield

PENTODE UNIT — AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE	300 max.	volts
GRID-No.3 (SUPPRESSOR-GRID) VOLTAGE:		
Negative value.	300 max.	volts
Positive value.	300 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE.	300 max.	volts
GRID-No.2 VOLTAGE	See <i>Grid-No.2 Input Rating Chart</i> at front of Receiving Tube Section	
GRID-No.1 (CONTROL-GRID) VOLTAGE:		
Negative-bias value	50 max.	volts
Positive-bias value	0 max.	volts
GRID-No.3 INPUT	0.2 max.	watt
GRID-No.2 INPUT:		
For grid-No.2 voltages		
up to 150 volts	0.6 max.	watt
For grid-No.2 voltages between		
150 and 300 volts	See <i>Grid-No.2 Input Rating Chart</i> at front of Receiving Tube Section	
PLATE DISSIPATION	3 max.	watts
BULB TEMPERATURE (At hottest point		
on bulb surface).	150 max.	°C

DIODE UNIT

Maximum Ratings, Design-Maximum Values:

PLATE CURRENT	1 max.	ma
-------------------------	--------	----

Characteristics, Instantaneous Value:

Plate Current for plate volts = 10.	2	ma
---	---	----

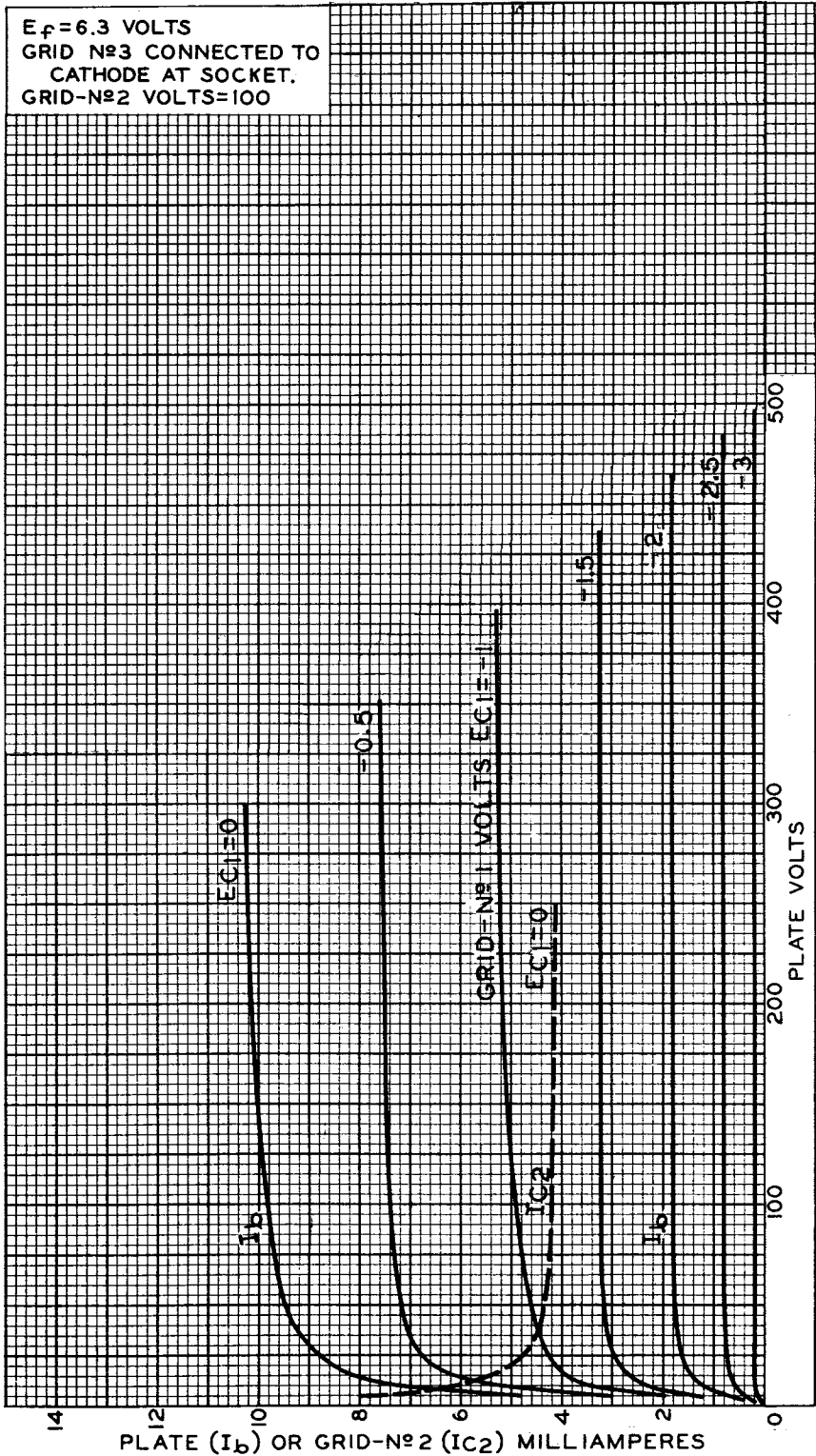
^a The dc component must not exceed 100 volts.

^b Without external shield.



AVERAGE CHARACTERISTICS

Pentode Unit

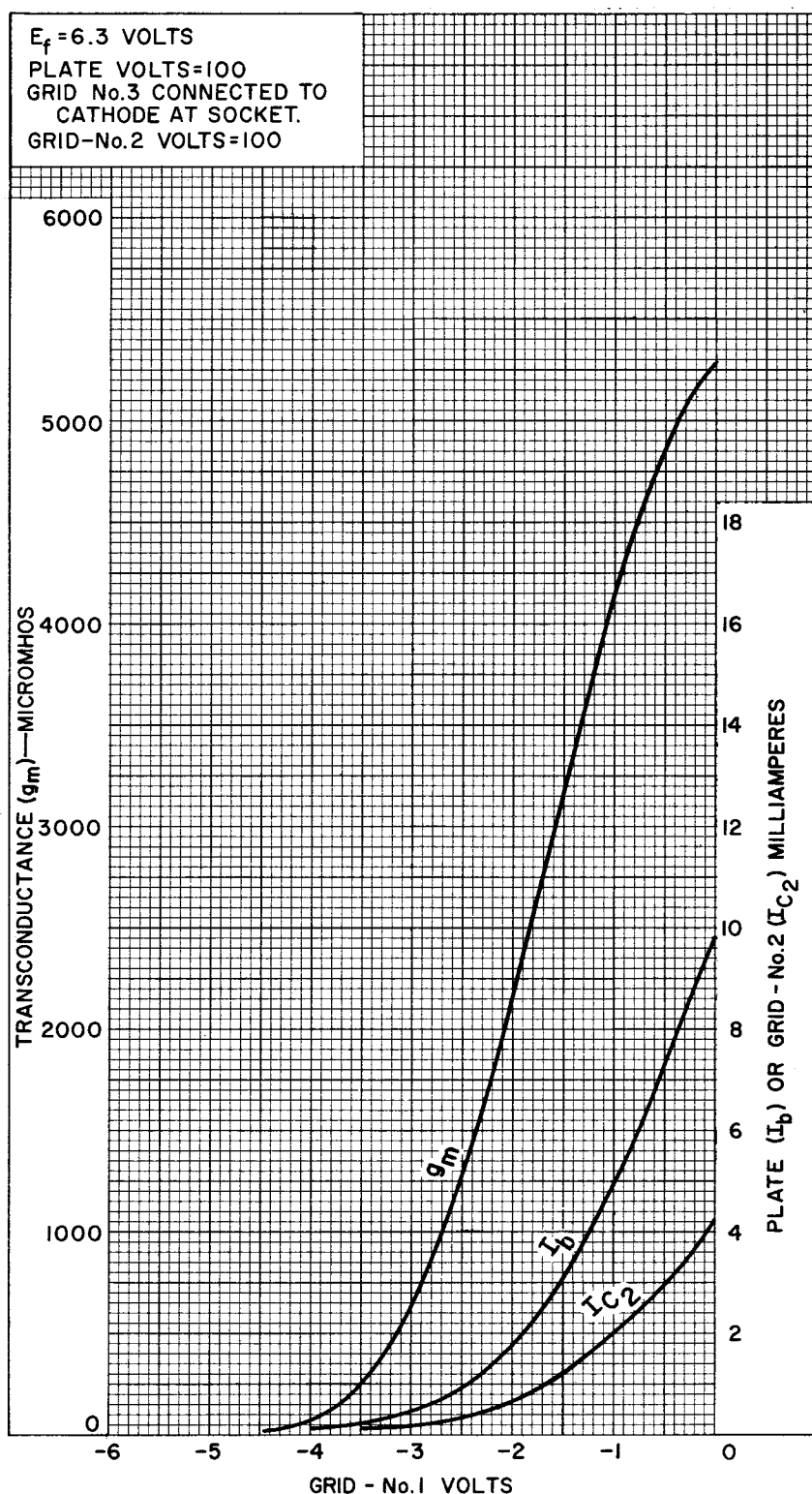


92CM-661IRI



6KL8

AVERAGE CHARACTERISTICS Pentode Unit



92CM-11678RI

