1949
VACUUM-GAUGE TUBE

HARD-GLASS BULB, IONIZATION TYPE

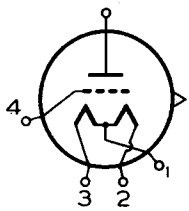
DATA

General:

Filament, Tungsten:*
- Voltage (Approx.) . . . . 5 . . . . . ac or dc volts
- Current (Approx.) . . . . 3.5 . . . . . amp

Maximum Tube Length (Including tubulation) . . . . 11-1/2"
Maximum Tube Radius . . . . . 2-3/16"
Maximum Bulb Length . . . . . 5-1/8"
Maximum Bulb Diameter . . . . . 2-1/16"
Bulb T-16
Tubulation . . . . . 1/2" Diameter Hard Glass, Corning Code 772 Nonex
Operating Position . . . . . Vertical with tubulation up or down; Horizontal, with stem press in vertical plane
Terminal Arrangement . . . . . See Outline Drawing
Terminal Lead Connections:

Lead 1 – Common Lead to Filaments
Lead 2 – Filament
Lead 3 – Filament (Spare)



Lead 4 – Grid
Top Lead – Plate

Maximum Ratings, *Absolute Values:* ←

FILAMENT VOLTAGE	6.5 max.	volts
DC PLATE VOLTAGE DURING OPERATION . .	-100 max.	volts
DC GRID VOLTAGE DURING OPERATION . .	+200 max.	volts
VOLTAGE ON GRID & PLATE TIED TOGETHER DURING DEGASSING (DC OR PEAK AC)	650 max.	volts
GRID & PLATE DISSIPATION (TOTAL) DURING DEGASSING . .	150 max.	watts
AMBIENT TEMPERATURE DURING OPERATION.	100 max.	°C
GAS PRESSURE	0.001 max.	mm of Hg

Typical Degassing Conditions: ←

	Grid Connected to Plate		
Filament Voltage (AC or DC) . . .	6	6	volts
Grid & Plate Voltage	350 rms	500 dc	volts
Grid & Plate Current (Average)	100	150	ma

Typical Operation:

DC Plate Voltage	-22.5	-22.5	-22.5	volts

* The 1949 contains two filaments, one of which is a spare. Values shown are for either filament operated alone. The filament voltage should be kept as low as possible during degassing because use of a low filament voltage materially increases filament life.

← Indicates a change

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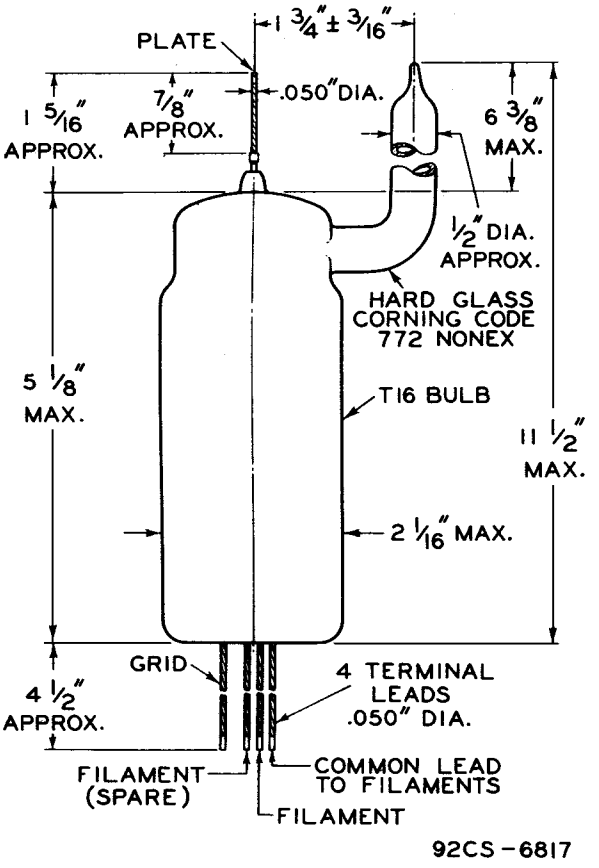
VACUUM-GAUGE TUBE

DC Grid Voltage	+80	+110	+160	volts
Grid Current	10	10	10	ma
Sensitivity	80	110	140	μa/micron▲

Calibration:

See curve on following sheet.

▲ 1 micron = 0.001 mm of mercury.



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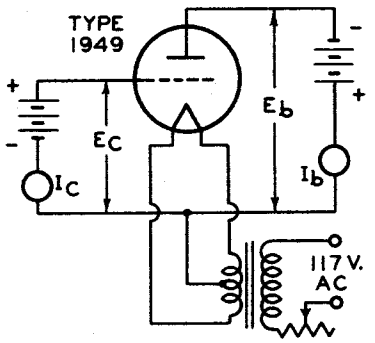
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

RCA

1949

CALIBRATION CURVES



GAS = DRY AIR
GRID MILLIAMPERES(I_C) = 10
PLATE VOLTS(E_b) = −22.5
TO CONVERT MM TO MICRONS, MULTIPLY VALUES BY 1000

GAS PRESSURE — MM OF Hg

GRID VOLTS (E_C) = +80
+110
+160

PLATE MICROAMPERES (I_b)

MAR. 11, 1947

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