



1654

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HALF-WAVE VACUUM RECTIFIER

MINIATURE TYPE

GENERAL DATA

Electrical:

Filament, Coated:

Voltage 1.4 ac or dc volts

Current 0.05 amp

Direct Interelectrode Capacitance (Approx.):⁰

Plate to Filament 1.4 μf

⁰ with no external shield.

Mechanical:

Mounting Position Any

Maximum Overall Length 2-7/16"

Maximum Seated Length 2-3/16"

Maximum Diameter 3/4"

Bulb T-5-1/2

Base Small-Button Miniature 7-Pin

Basing Designation for BOTTOM VIEW 2Z

Pin 1 - Filament -

Pin 2 - Internal Con.

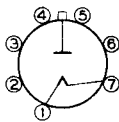
Do Not Use

Pin 3 - Internal Con.

Do Not Use

Pin 4 - No Connection

Pin 5 - No Connection



Pin 6 - Internal Con.

Do Not Use

Pin 7 - Filament +

Bulb

Ter-

minal

} Plate

HALF-WAVE RECTIFIER

Maximum Ratings, Design-Center Values:^{*}

PEAK INVERSE PLATE VOLTAGE 4300 max. volts ←

PEAK PLATE CURRENT[■] 6 max. ma

AVERAGE PLATE CURRENT 1 max. ma

Typical Operation:

AC Plate-Supply Voltage 1500 .. volts ←

Filter-Input Capacitor 0.025 .. μf

Total Effective Plate-Supply Impedance 150000 .. ohms ←

DC Output Current 1 .. ma

DC Output Voltage (At Input to Filter)^{*} 1230 .. volts ←

Circuit Values:

A plate-supply impedance of 150000 ohms is required in order that the "hot-switching" current will not exceed the permissible value of 15 ma. under conditions of normal line-voltage fluctuation. For plate-supply voltages lower than 1500 volts, the plate-supply impedance may be decreased provided the resultant peak-current rating of 6 ma. and the "hot-switching" current of 15 ma. are not exceeded.

■, *, : See next page.

← Indicates a change.

1654



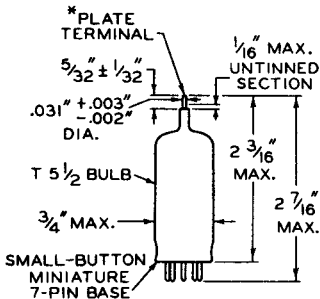
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• These ratings apply to the 1654 when it is operated from a power supply having a frequency up to 500 cycles per second. If a contemplated application involves higher supply frequencies, please write, stating the proposed operating frequency, to Commercial Engineering, RCA, Harrison, N. J., as to the required reduction in ratings.

→ • A peak value of 15 ma. for 0.1 second is permitted under conditions of "hot-switching", i.e., switching the plate circuit "on" while the filament is hot.

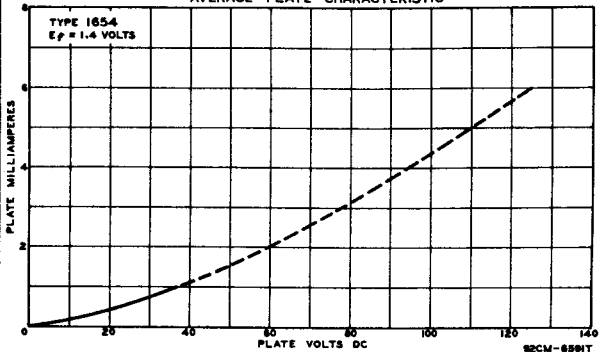
* Values are approximate.

→ Indicates a change.



*PLATE TERMINAL AT TIP MAY BE ECCENTRIC WITH RESPECT TO BASE AXIS BY $1/8$ " MAX.

AVERAGE PLATE CHARACTERISTIC



MAR. 15, 1948

TUBE DEPARTMENT

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

DATA