

# 6DE4

## Half-Wave Vacuum Rectifier

### For Television Damper Service

#### GENERAL DATA

##### Electrical:

Heater, for Unipotential Cathode:

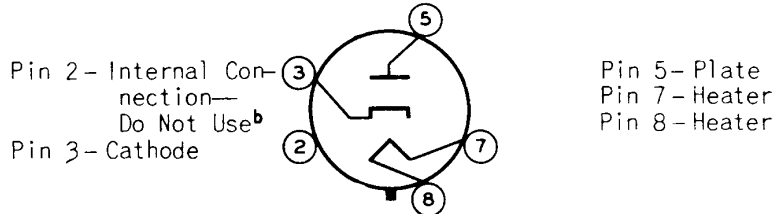
Voltage (AC or DC) . . . . .	6.3 ± 10%	volts
Current at 6.3 volts. . . . .	1.6	amp

Direct Interelectrode Capacitances  
(Approx.):<sup>a</sup>

Plate to cathode and heater . . . . .	8.5	μμf
Cathode to plate and heater . . . . .	11.5	μμf
Heater to cathode . . . . .	4	μμf

##### Mechanical:

Operating Position. . . . .	Any
Maximum Overall Length. . . . .	3-13/16"
Maximum Seated Length . . . . .	3-1/4"
Maximum Diameter. . . . .	1-9/32" ←
Bulb. . . . .	T9
Base. . . . .	Short Intermediate-Shell Octal 5-Pin with External Barriers, Arrangement 2 (JEDEC Group 1, No. B5-85)
Basing Designation for BOTTOM VIEW. . . . .	4CG



#### DAMPER SERVICE

##### Maximum Ratings, Design-Maximum Values: ←

*For operation in a 525-line, 30-frame system<sup>c</sup>*

PEAK INVERSE PLATE VOLTAGE <sup>d</sup> . . . . .	5500 max.	volts
PEAK PLATE CURRENT. . . . .	1100 max.	ma
DC PLATE CURRENT. . . . .	180 max.	ma
PLATE DISSIPATION . . . . .	6.5 max.	watts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode <sup>d</sup> . . . . .	5500 <sup>e</sup> max.	volts
Heater positive with respect to cathode . . . . .	300 <sup>f</sup> max.	volts

##### Characteristics, Instantaneous Value: ←

Tube Voltage Drop for plate ma. = 350 . . . . .	34	volts
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<sup>a</sup> Without external shield.

<sup>b</sup> Socket terminals 1, 2, 4 and 6 should not be used as tie points.

<sup>c</sup> As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

← Indicates a change.



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- d This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 micro-seconds.
- e The dc component must not exceed 900 volts.
- f The dc component must not exceed 100 volts.

## OPERATING CONSIDERATIONS

It is recommended that socket clips for pins 1, 2, 4, and 6 be removed to reduce the possibility of arc-over and to minimize leakage.

