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 ............ 1.2 amp

Direct Interelectrode Capacitances
(Approx.): *
Plate to cathode and heater ....... 5 μf
Cathode to plate and heater ...... 8.5 μf
Heater to cathode ............... 4 μf

Mechanical:
Operating Position .................. Any
Maximum Overall Length ............ 3-5/16"
Maximum Seated Length ............. 2-3/4"
Maximum Diameter .................. 1-9/32"
Dimensional Outline ................ See General Section
Bulb ................................ 79
Base ............................. Intermediate-Shell Octal 5-Pin,
Arrangement 2 (JEDEC Group 1, No. B5-82),
Intermediate-Shell Octal 5-Pin
with External Barriers, Arrangement 2
(JEDEC Group 1, No.B5-147),
Short Intermediate-Shell Octal 5-Pin
with External Barriers, Arrangement 2
(JEDEC Group 1, No.B5-85), or
Short Intermediate-Shell Octal 6-Pin
with External Barriers, Arrangement 1
(JEDEC Group 1, No.B6-60)

Basing Designation for BOTTOM VIEW ........ 4CG

Pin 1b – Same as Pin 2
Pin 2 – Internal Connection—Do Not Use
Pin 3 – Cathode
Pin 5 – Plate
Pin 7 – Heater
Pin 8 – Heater

DAMPER SERVICE

Maximum Ratings, Design—Maximum Values:
For operation in a 525-line, 30-frame system

PEAK INVERSE PLATE VOLTAGE* ........ 4400 max. volts
PEAK PLATE CURRENT .................. 825 max. ma
DC PLATE CURRENT .................... 137 max. ma
PLATE DISSIPATION .................... 5 max. watts

* Indicates a change.
PEAK HEATER–CATHODE VOLTAGE:
Heater negative with respect to cathode. 4400 volts max.
Heater positive with respect to cathode. 300 volts max.

**Characteristics, Instantaneous Test Condition:**
Tube Voltage Drop for plate ma. = 250... 32 volts

- **a** Without external shield.
- **b** On the 5-pin bases, pin 1 as well as pins 4 and 6 is omitted.
- **c** Socket terminals 1, 2, 4 and 6 should not be used as tie points.
- **d** As described in "Standards of Good Engineering Practice Concerning Television broadcast Stations," Federal Communications Commission.
- **e** This rating is applicable when the duty cycle 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 microseconds.
- **f** The dc component must not exceed 900 volts.
- **g** The dc component must not exceed 100 volts.

*→ Indicates a change.*

**AVERAGE PLATE CHARACTERISTIC**

![Graph showing the average plate characteristic with E_L=6.3 VOLTS.](image)

**92CS-7829**