

Full-Wave Vacuum Rectifier

GENERAL DATA

Electrical:

Filament, Coated:

Voltage (AC or DC). $5 \pm 10\%$ volts

Current at 5 volts. 3 amp

Mechanical:

Operating Position. Vertical, base down or up, or
Horizontal with pins 2 and 4 in vertical plane

Maximum Overall Length. 4-5/8"

Maximum Seated Length. 4-1/16"

Diameter. 1.438" to 1.562"

Bulb. T12

Base. . . Short Medium-Shell Octal 8-Pin with External Barriers

Style B (JEDEC Group 1, No. B8-118) or

Style A (JEDEC Group 1, No. B8-110), or

Short Medium-Shell Octal 5-Pin with External Barriers,

Style B, Arrangement 1 (JEDEC Group 1, No. B5-121)

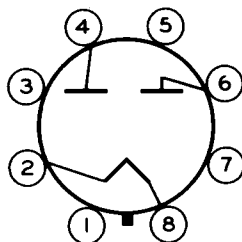
Basing Designation for BOTTOM VIEW. 5T

Pin 1 - No Connection

Pin 2 - Filament

Pin 3^a - Same as Pin 1

Pin 4 - Plate No. 2



Pin 5 - Same as Pin 1

Pin 6 - Plate No. 1

Pin 7 - Same as Pin 1

Pin 8 - Filament

FULL-WAVE RECTIFIER

Maximum Ratings, Design-Maximum Values:

For power-supply frequencies of 25 to 1000 cps

PEAK INVERSE PLATE VOLTAGE. 1550 max. volts

AC PLATE SUPPLY VOLTAGE PER PLATE

(RMS, without load) 550 max. volts

STEADY-STATE PEAK PLATE CURRENT PER PLATE . . . 1.4 max. amp

TRANSIENT PEAK PLATE CURRENT PER PLATE. . . 6.6 max. amp

DC OUTPUT CURRENT with capacitor-input

filter for ac plate supply volts (RMS,
per plate, without load) = 470. 415 max. ma

Typical Operation:

*With capacitor-
input filter*

*With choke-
input filter*

AC Plate-to-Plate

Supply Voltage

(RMS, without load) . . . 600 850 1000 volts

Filter-Input

Capacitor^b. 40 40 - μ f

Filter-Input Choke. . . - - 10 henrys



5V3A

Total Effective Plate

Supply Impedance				
Per Plate	20	50	—	ohms
DC Output Voltage at				
input to filter . . .	300	440	390	volts
DC Output Current . . .	380	350	350	ma

Characteristics:

Tube-Voltage Drop for plate ma. = 350
(Per plate) 42 volts

- ^a On the 5-pin base, pin 3 as well as pins 5 and 7 is omitted.
- ^b When capacitance values higher than 40 μ f are used, the effective plate supply impedance should be increased so that the maximum peak-plate-current rating is not exceeded.

