



35Y4

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HALF-WAVE VACUUM RECTIFIER

GENERAL DATA

Electrical:

Without Panel Lamp With No. 40 or No. 47 Panel Lamp[▲]

Heater, for Unipotential Cathode:

Voltage (AC or DC):

Entire Heater (pins 1 & 8) . . . 35 . . . volts

Panel-Lamp Section (pins 1 & 4) . . . 7.5 . . . volts

Current { between pins 1 & 8 . . . 0.15 . . . amp
 between pins 4 & 8 . . . - . . . 0.15 . . . amp

[▲] Under typical operating conditions shown below.

Mechanical:

Mounting Position. Any

Maximum Overall Length 3-5/32"

Maximum Seated Length. 2-5/8"

Maximum Diameter 1-3/16"

Bulb T-9

Base Lock-in 8-Pin

Basing Designation for BOTTOM VIEW 5AL

Pin 1 - Heater

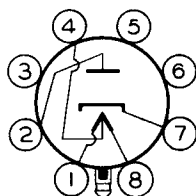
Pin 2 - Plate

Pin 3 - No Connection

Pin 4 - Heater Tap

Pin 5 - No Connection

Pin 6 - No Connection



Pin 7 - Cathode

Pin 8 - Heater

Plug - Base Shell

Panel-Lamp Heater

Section is between pins 1 & 4

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Maximum Ratings, Design-Center Values:

PEAK INVERSE PLATE VOLTAGE 700 max. volts

PEAK PLATE CURRENT 600 max. ma

DC OUTPUT CURRENT:

With Panel Lamp & { No Shunting Resistor. . . 60 max. ma
 Shunting Resistor. . . 90 max. ma

Without Panel Lamp 100 max. ma

PANEL-LAMP-SECTION VOLTAGE (RMS):

When panel lamp fails. 15 max. volts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode . . . 300 max. volts

Heater positive with respect to cathode . . . 300 max. volts

Typical Operation With No. 40 or No. 47 Panel Lamp
 in Circuit Below with Capacitor-Input Filter:

AC Plate-Supply Volt. (RMS) 117 117 117 117 235 volts

Filter-Input Capacitor . . . 40 40 40 40 40 μ f

Min. Total Effective

Plate-Supply Impedance . . . 15 15 15 15 100 ohms

Panel-Lamp Shunting Res. . . - 300 150 100 - ohms

DC Output Current. 60 70 80 90 60 ma

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Typical Operation Without Panel Lamp in Conventional Half-Wave Circuit with Capacitor-Input Filter:

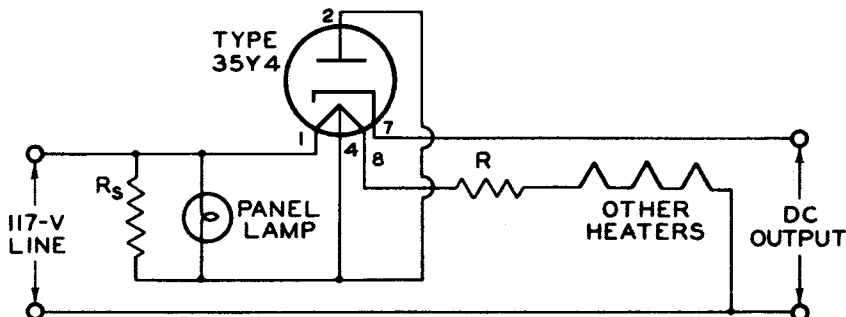
AC Plate-Supply Voltage (RMS)	117	235	volts
Filter-Input Capacitor	40	40	μ f
Min. Total Effective Plate-Supply Imped.	15	100	ohms
DC Output Current	100	100	ma
DC Output Voltage at Input to Filter (Approx.):			
At half-load current (50 ma.)	140	280	volts
At full-load current (100 ma.)	120	235	volts
Voltage Regulation (Approx.):			
Half-load to full-load current	20	45	volts

Maximum Circuit Values:

Panel-Lamp Shunting Resistor:*

For dc output current of	70 ma. . . .	800 max.	ohms
	80 ma. . . .	400 max.	ohms
	90 ma. . . .	250 max.	ohms

* Required when dc output current is greater than 60 ma.



DROP ACROSS R AND ALL HEATERS (WITH
PANEL LAMP) SHOULD EQUAL 117 VOLTS AT
0.15 AMPERE. R_s = SHUNTING RESISTOR
REQUIRED WHEN DC OUTPUT CURRENT
EXCEEDS 60 MILLIAMPERES

92CS-6626

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