



TYPE 35Z5GT

Excellence in Electronics

The 35Z5GT is a heater-cathode type diode designed for use as a half-wave rectifier in ac/dc receivers. A heater tap is provided to permit operation with a panel lamp.

MECHANICAL DATA

ENVELOPE: T-9 Glass

BASE: Intermediate or Short Intermediate Shell Octal 6-Pin

TERMINAL CONNECTIONS:

- Pin 1 No Connection
- Pin 2 Heater
- Pin 3 Heater Tap
- Pin 5 Plate
- Pin 7 Heater
- Pin 8 Cathode

MOUNTING POSITION: Any

ELECTRICAL DATA

HEATER CHARACTERISTICS:

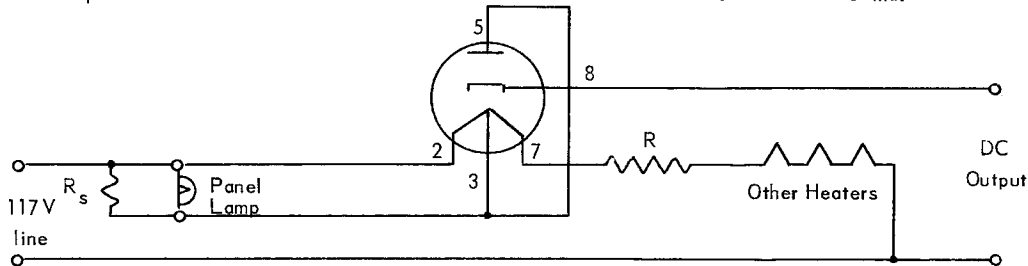
	Without Panel Lamp ▲	With #40 or #47 Panel Lamp
Heater Voltage (ac or dc) (Pins 3 and 4)	35	32 volts
Panel-Lamp Section (Pins 4 and 6)	7.5	5.5 volts
Heater Current		
Between Pins 3 and 4	0.15	---- amp.
Between Pins 3 and 6	----	0.15 amp.
Maximum Heater-Cathode Voltage:		
Heater Positive with Respect to Cathode		
Total DC and Peak	350	volts
Heater Negative with Respect to Cathode		
Total DC and Peak	350	volts

DESIGN CENTER MAXIMUM RATINGS:

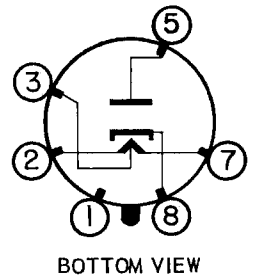
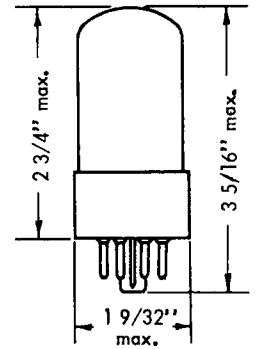
Peak Inverse Plate Voltage	700 volts
Steady State Peak Plate Current	600 ma.
Panel-Lamp Section RMS Voltage When Panel Lamp Fails	15 volts
Steady-State DC Output Current:	
With Panel Lamp and No Shunting Resistor	60 ma.
With Panel Lamp and Shunting Resistor	90 ma.
Without Panel Lamp	100 ma.
Panel Lamp Shunting Resistor:	
For DC Output Current of 70 ma.	800 ohms
For DC Output Current of 80 ma.	400 ohms
For DC Output Current of 90 ma.	250 ohms
Tube Voltage Drop with Tube Conducting 200 mA dc Plate Current	18 volts

CHARACTERISTICS AND TYPICAL OPERATION WITH No. 47 PANEL LAMP IN CIRCUIT:

AC Plate Supply Voltage (RMS)	117	117	117	117 volts
Filter Input Capacitor	40	40	40	40 μf.
Minimum Total Effective Plate Supply Impedance	15	15	15	15 ohms
Panel Lamp Shunting Resistor	----	300	150	100 ohms
DC Output Current	60	70	80	90 ma.



Drop across R and all heaters (with panel lamp) should equal 117 volts at 0.15 amperes. R_s = shunting resistor required when DC output current exceeds 60 ma.



BOTTOM VIEW

6AD

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DIODE

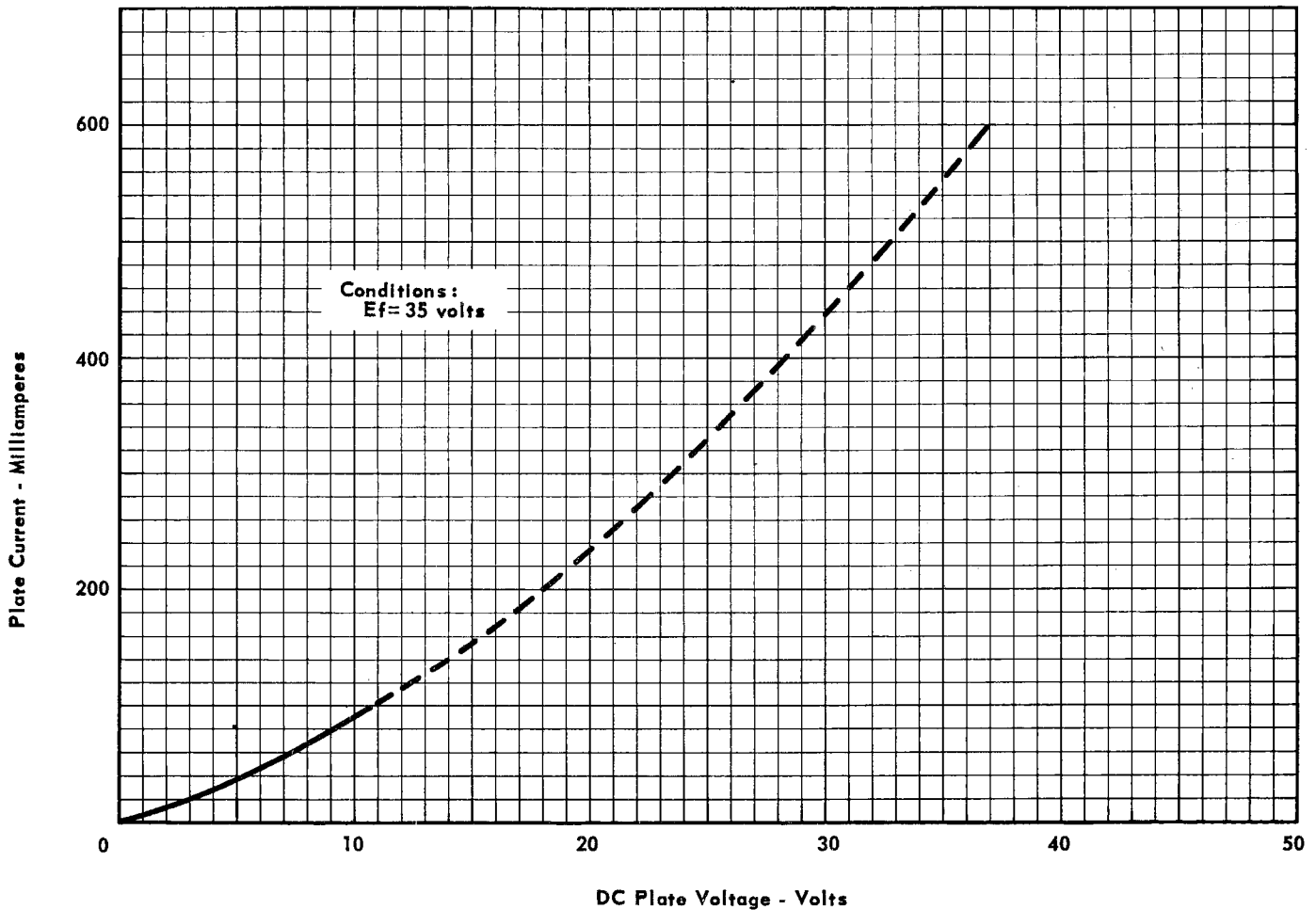
ELECTRICAL DATA (cont'd)

CHARACTERISTICS AND TYPICAL OPERATION WITHOUT PANEL LAMP IN CONVENTIONAL HALF-WAVE CIRCUIT : ♦

AC Plate Supply Voltage (RMS)	117 volts
Filter Input Capacitor	40 μ f
Minimum Total Effective Plate Supply Impedance	15 ohms
DC Output Voltage at Input to Filter (approx.)	135 volts
At 50 ma (half-load)	135 volts
At 100 ma (full-load)	120 volts
DC Output Current	100 ma.

- Panel Lamp heater section is between pins 4 and 6.
- ▲ Plate Current must not flow through top section.
- ♦ With capacitor input to filter.

AVERAGE PLATE CHARACTERISTICS



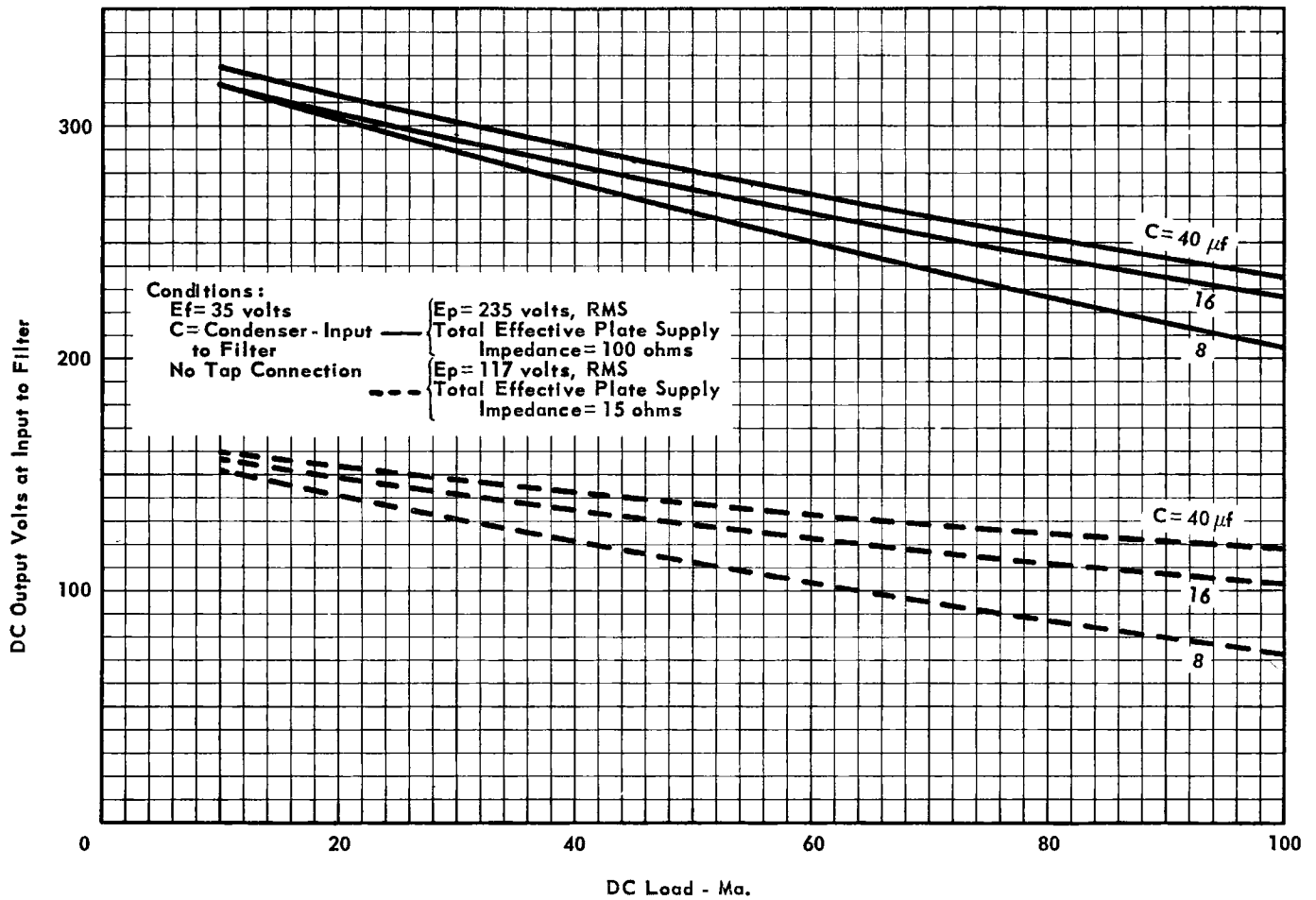
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OPERATION CHARACTERISTICS



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