Electronic TUBE
KEN-RAD

35Z5-GT

Description and Rating

HALF-WAVE HIGH-VACUUM RECTIFIER

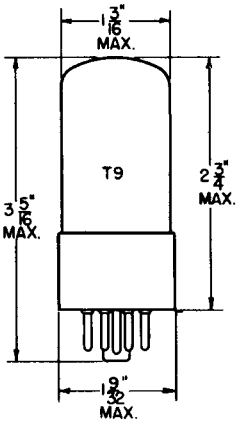
GENERAL DESCRIPTION

Principal Application: The 35Z5-GT is a half-wave high-vacuum rectifier designed for use in a-c/d-c receivers. The heater is tapped to permit operation of a panel lamp. It is recommended that the plate be connected to the heater tap so that the plate current will pass through the panel lamp and the tapped section of the heater.

Cathode	Coated Unipotential
Heater Voltage (A-C or D-C)*	35.0 Volts
Heater Tap Voltage*	7.5 Volts
Heater Current*	0.15 Ampere

Envelope	T-9 Glass
Base	B6-8, Intermediate Shell Octal 6-Pin
Mounting Position	Any

PHYSICAL DIMENSIONS

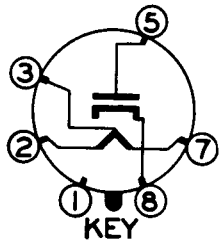


RMA 9-11

TERMINAL CONNECTIONS

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

BASING DIAGRAM



RMA 6AD
BOTTOM VIEW

MAXIMUM RATINGS

DESIGN CENTER VALUES:

Peak Inverse Plate Voltage	700	Volts
A-C Plate Supply Voltage (RMS)	235	Volts
Steady-State Peak Plate Current	600	Milliamperes
Steady-State D-C Output Current:		
Without Panel Lamp	100	Milliamperes
With Panel Lamp and Shunting Resistor	90	Milliamperes
With Panel Lamp and No Shunting Resistor	60	Milliamperes
Panel Lamp Shunting Resistor:		
For D-C Output Current of 70 Milliamperes	800	Ohms
For D-C Output Current of 80 Milliamperes	400	Ohms
For D-C Output Current of 90 Milliamperes	250	Ohms
Heater Tap Voltage (RMS) When Panel Lamp Fails	15	Volts
D-C Heater Cathode Voltage	350	Volts

** Values are for operation without panel lamp. For heater voltage and current ratings with panel lamp, refer to Characteristics and Typical Operation given on page 2. The heater tap voltage is measured between pins 2 and 3 with 0.15 ampere flowing between pins 2 and 7.*

Supersedes ET-T409A dated 10-47

CHARACTERISTICS AND TYPICAL OPERATION

HALF-WAVE RECTIFIER - WITH PANEL LAMP NUMBER 40 OR NUMBER 47

Heater Voltage (Pin 2 to Pin 7)	32	32	32	32	32	. . . .	Volts
Heater Tap Voltage (Pin 2 to Pin 3)	5.5	5.5	5.5	5.5	5.5	. . . .	Volts
Heater Current (Between Pins 3 and 7)	0.15	0.15	0.15	0.15	0.15	. . . .	Ampere
A-C Plate Supply Voltage (RMS)	117	117	117	117	235	. . . .	Volts
Filter Input Capacitor	40	40	40	40	40	. . . .	Microfarads
Minimum Total Effective Plate Supply Impedance	15	15	15	15	100	. . . .	Ohms
Panel Lamp Shunting Resistor #	---	300	150	100	---	. . . .	Ohms
D-C Output Current	60	70	80	90	60	. . . .	Milliamperes

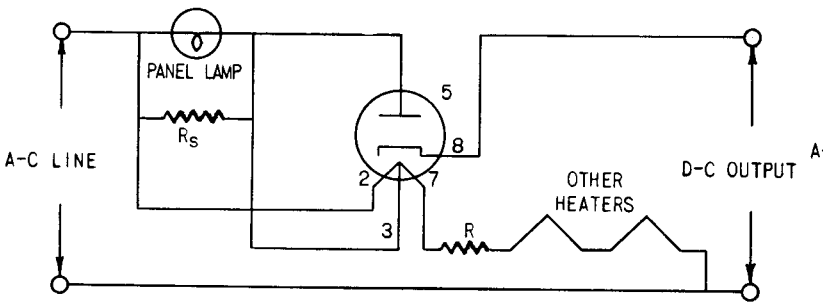
HALF-WAVE RECTIFIER - WITHOUT PANEL LAMP

Heater Voltage (Pin 2 to Pin 7)	35	35	. . . . .	Volts
Heater Tap Voltage (Pin 2 to Pin 3)	7.5	7.5	. . . . .	Volts
Heater Current (Between Pins 3 and 7)	0.15	0.15	. . . . .	Ampere
A-C Plate Supply Voltage (RMS)	117	235	. . . . .	Volts
Filter Input Capacitor	40	40	. . . . .	Microfarads
Minimum Total Effective Plate Supply Impedance	15	100	. . . . .	Ohms
D-C Output Current	100	100	. . . . .	Milliamperes
D-C Output Voltage at Input to Filter: (Approx)				
At 50 Milliamperes Load Current	140	280	. . . . .	Volts
At 100 Milliamperes Load Current	120	235	. . . . .	Volts

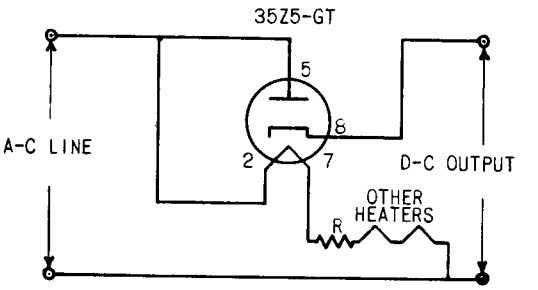
Tube Voltage Drop:
Measured with Applied D-C at 200 Milliamperes . . . . . 18 . . . . . Volts

 # Shunting resistor required if d-c output current is greater than 60 milliamperes.

TYPICAL CIRCUIT FOR OPERATION WITH PANEL LAMP



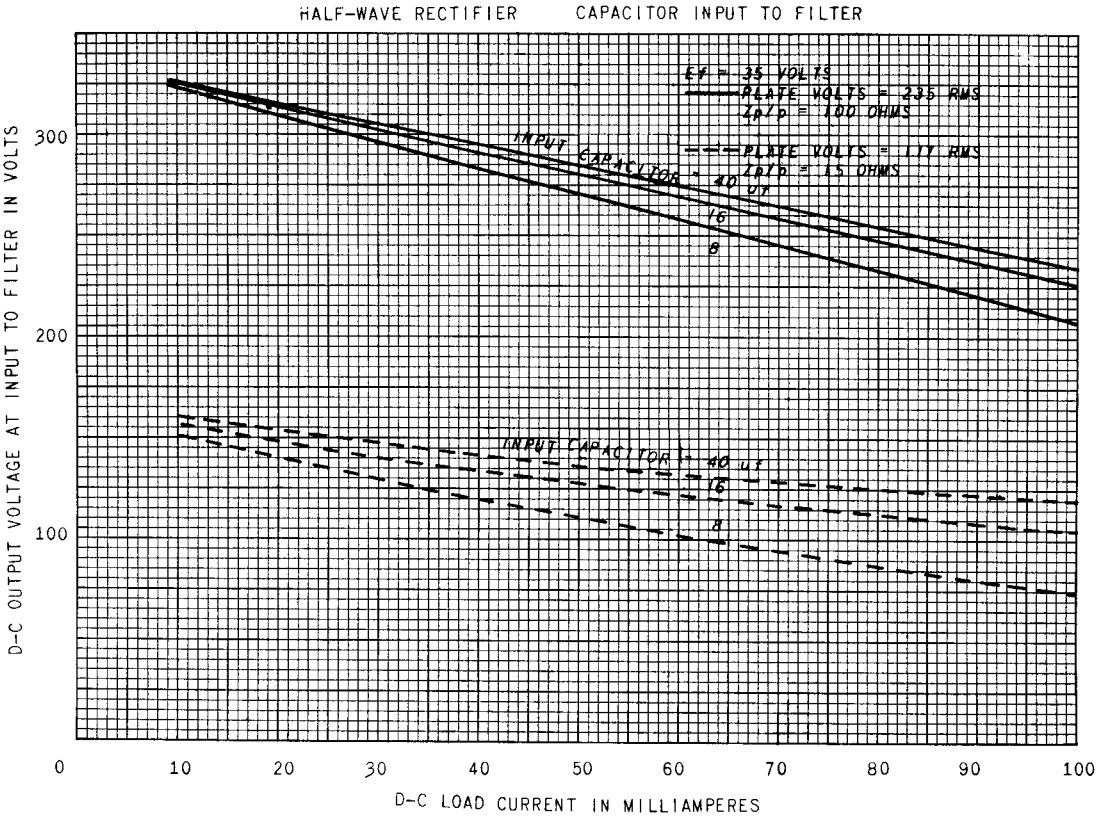
TYPICAL CIRCUIT FOR OPERATION WITHOUT PANEL LAMP



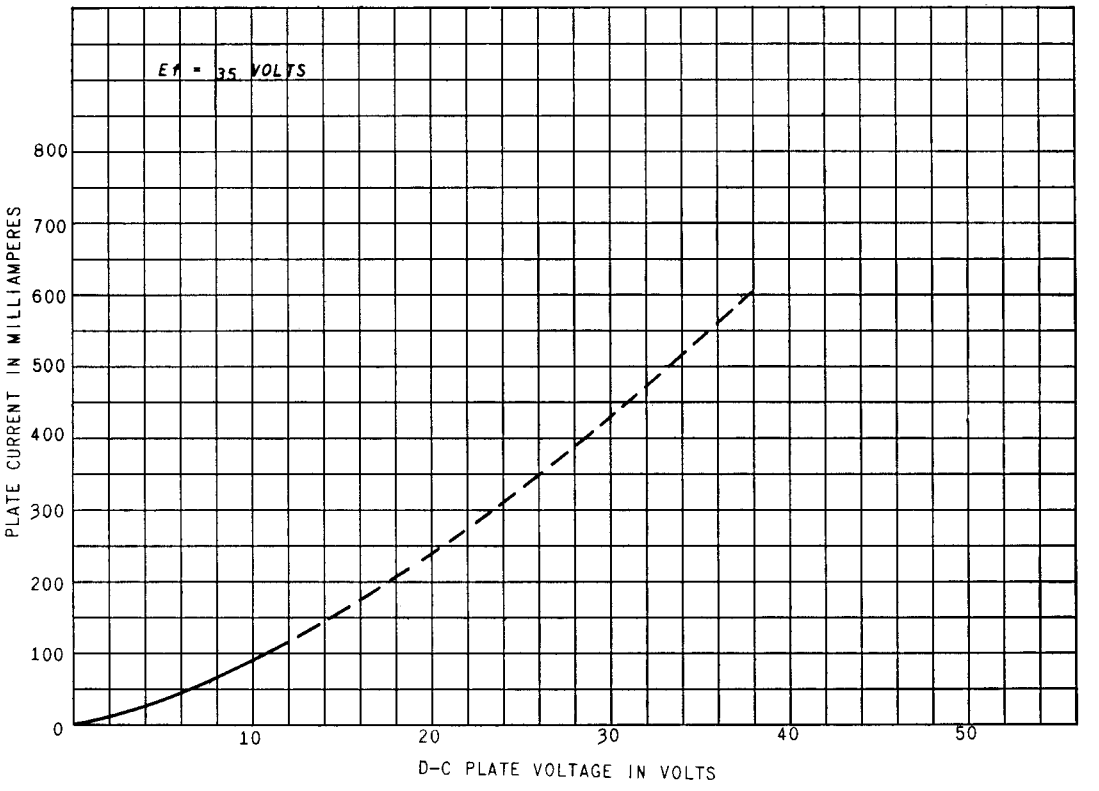
Rs = Panel-lamp shunting resistor

Drop across R at 0.15 ampere should equal difference between line voltage and total of all rated heater voltages.

OPERATION CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS



Tube Divisions, Electronics Department

GENERAL ELECTRIC

Schenectady, N. Y.