



**Electronic**  
TUBE

# 6X5-GT Description and Rating

## TWIN DIODE

FOR FULL-WAVE POWER RECTIFIER APPLICATIONS

The 6X5-GT is a full-wave high-vacuum rectifier designed for use in the power supply of automobile and a-c radio receivers.

### GENERAL

Cathode - Coated Unipotential  
 Heater Voltage, A-C or D-C . . . . . 6.3 Volts  
 Heater Current . . . . . 0.6 Amperes  
 Envelope - T-9, Glass  
 Base - B5-82 or B6-8, Intermediate Shell Octal  
 or B5-85 or B6-60, Short Intermediate Shell Octal  
 Mounting Position - Any

### MAXIMUM RATINGS

#### DESIGN-CENTER VALUES

Peak Inverse Plate Voltage . . . . . 1250 Volts  
 Steady-State Peak Plate Current per Plate . . . . . 210 Milliampères  
 D-C Output Current . . . . . 70 Milliampères  
 Heater-Cathode Voltage  
 Heater Positive with Respect to Cathode . . . . . 450 Volts  
 Heater Negative with Respect to Cathode . . . . . 450 Volts

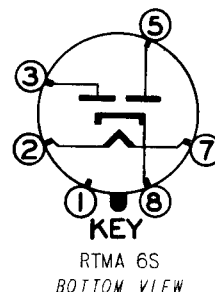
### CHARACTERISTICS AND TYPICAL OPERATION

#### FULL-WAVE RECTIFIER

	Capacitor Input Filter	Choke Input Filter	
A-C Plate-Supply Voltage per Plate, RMS . . . . .	325	450	Volts
Filter Input Capacitor . . . . .	4	---	Microfarads
Filter Input Choke . . . . .	---	8	Henrys
Total Effective Plate-Supply			
Impedance per Plate . . . . .	150	---	Ohms
D-C Output Current . . . . .	70	70	Milliampères
D-C Output Voltage at Filter Input			
For D-C Output Current of 35 Milliampères	405	385	Volts
For D-C Output Current of 70 Milliampères	370	380	Volts
Tube Voltage Drop			
At 70 Milliampères D-C per Plate . . . . .	22		Volts

\* Pin 1 omitted on bases B5-82 and B5-85.

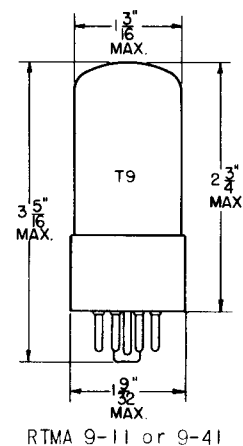
### BASING DIAGRAM



### TERMINAL CONNECTIONS

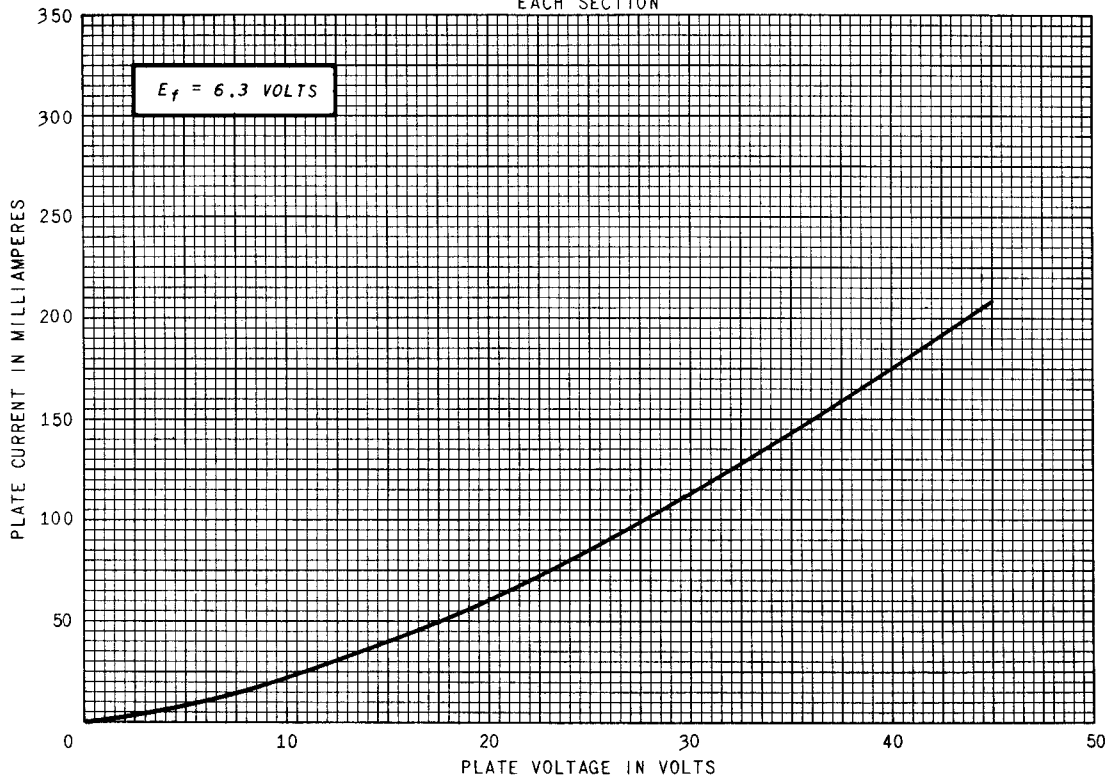
- Pin 1 - No Connection\*
- Pin 2 - Heater
- Pin 3 - Plate Number 2
- Pin 5 - Plate Number 1
- Pin 7 - Heater
- Pin 8 - Cathode

### PHYSICAL DIMENSIONS



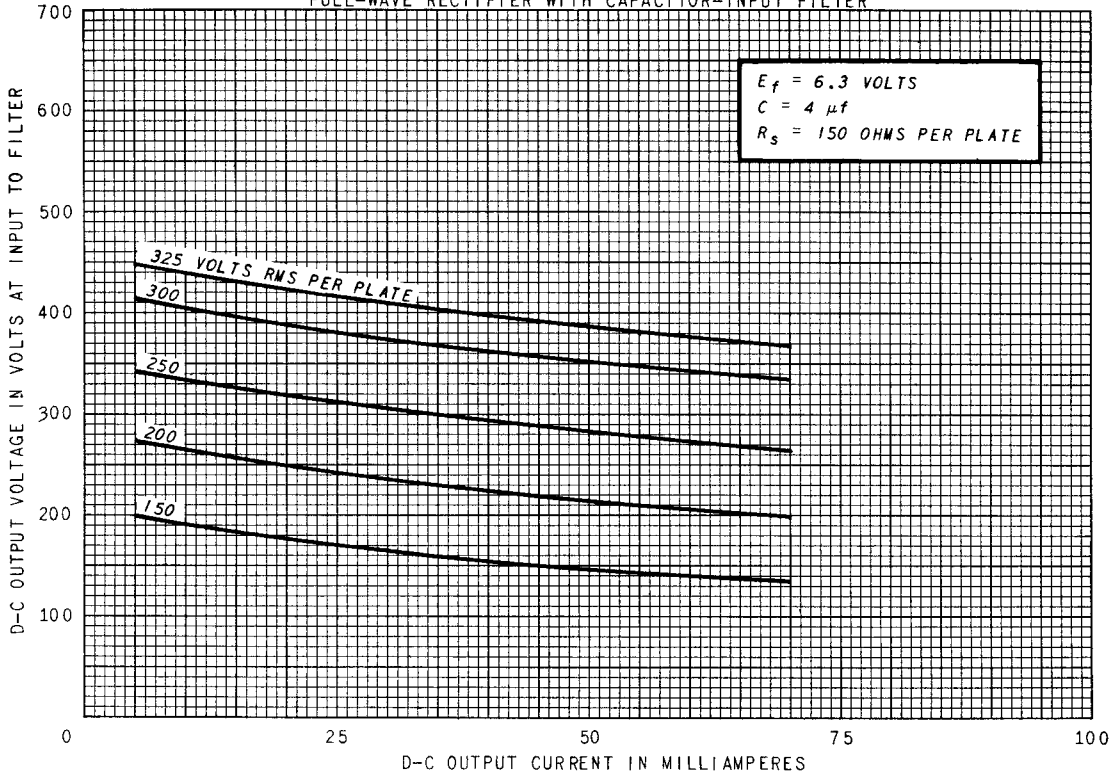
### AVERAGE PLATE CHARACTERISTICS

EACH SECTION



### OPERATION CHARACTERISTICS

FULL-WAVE RECTIFIER WITH CAPACITOR-INPUT FILTER



### OPERATION CHARACTERISTICS

FULL-WAVE RECTIFIER WITH CHOKE-INPUT FILTER

