UNITED ELECTRONICS

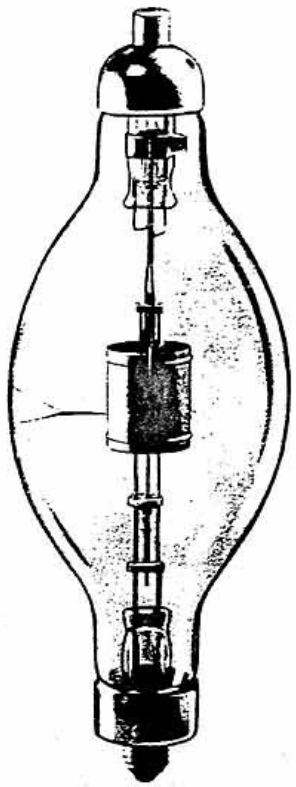
TYPE V-1901

HALF-WAVE HIGH VACUUM RECTIFIER

ENGINEERING INFORMATION

GENERAL RATINGS

Number of Electrodes	2
Filament Voltage	16.5 volts
Current	15.25 amperes
Type	Tungsten
Operating Conditions:	
Maximum Peak Inverse Voltage	70,000 volts
Maximum Peak Plate Current	1.2 amperes
Average Plate Current	40 ma.
Maximum Overall Dimensions:	
Length	17½ inches
Diameter	6 inches
Bulb	GT-48
Cap Diameter	.75 inch
Base	Edison Screw
Type of Cooling	Air
Net Weight	22¼ oz.



INSTALLATION

The base of the UNITED V-1901 is designed for mounting in an Edison screw type socket. The tube should always be mounted vertically with ample air space provided for ventilation.

The filament of the V-1901 should be allowed to come up to operating temperature before the plate voltage is applied.

The V-1901 is a rugged bright tungsten rectifier capable of delivering a rectified output current of 40 milliamperes at 10,000 volts with the filament voltage adjusted to maintain steady plate current flow. Operation at the maximum peak current of 1.2 amperes requires that precautions be taken to maintain exactly the filament voltage of 16.5 volts. When operating conditions are such, however, that the peak current is less than the full rated value, the regulation of the filament voltage need not be so exact. The permissible variation will depend on the magnitude of the peak current and will increase with decreased values of peak current. **Caution—The filament winding is at high potential.**

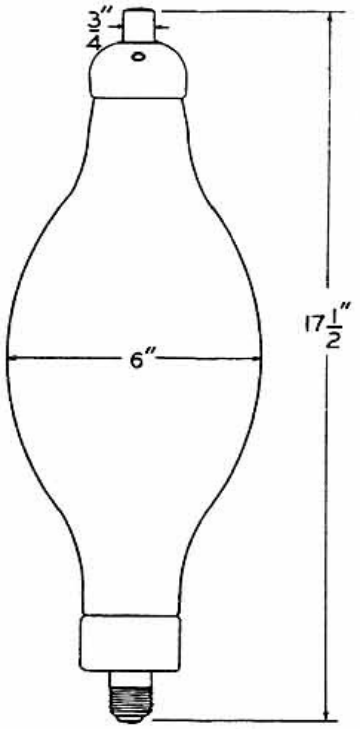
Since the V-1901 is used in high powered, high voltage systems, proper overload protection against excessive currents, and safety interlock circuits to safeguard personnel should be employed.

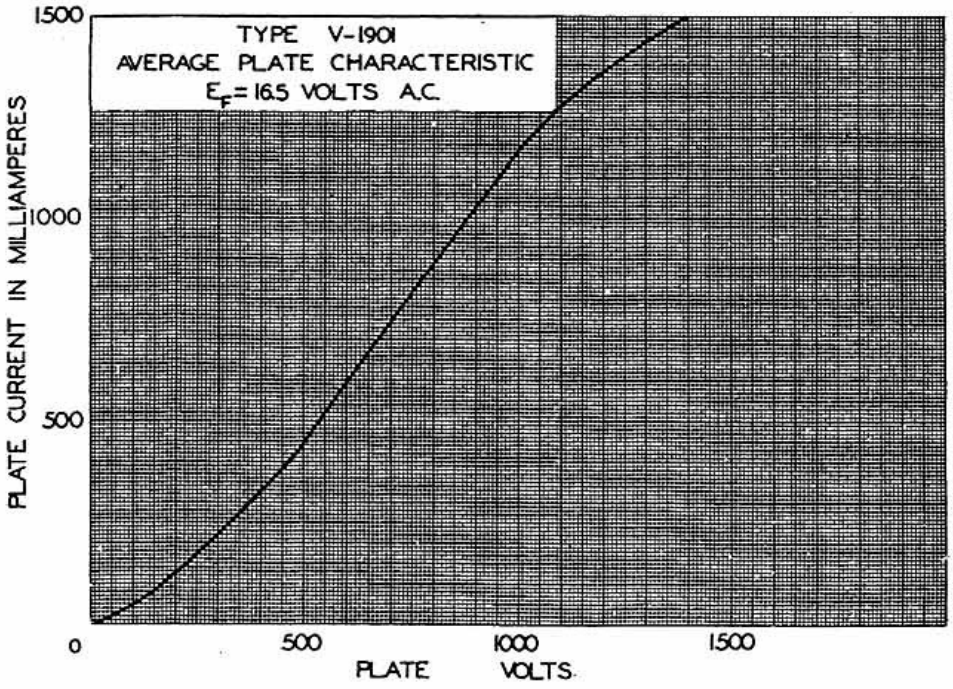
The filament circuit carries a fairly large current and precautions should be taken against voltage losses due to poor connections. All wires should be as far as reasonably possible from the glass of the tube in order to avoid the possibility of bulb puncture from corona discharges.

When the V-1901 is subjected during operation to external high voltage or high frequency fields, shielding and r-f filter circuits should be provided.

All ratings given are for continuous service. Higher ratings are permissible for intermittent operation. Additional data will be furnished upon request.

United


3/4"
17 1/2"
6"


TYPE V-1901
AVERAGE PLATE CHARACTERISTIC
E_f = 16.5 VOLTS A.C.
PLATE CURRENT IN MILLIAMPERES
1500
1000
500
0
500
1000
1500
PLATE VOLTS