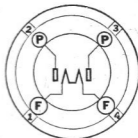


Sylvania

TYPE 80

FULL-WAVE RECTIFIER



CHARACTERISTICS

Filament Voltage AC	5.0 Volts
Filament Current	2.0 Amperes
Maximum Over-all Length	4 $\frac{11}{16}$ "
Maximum Diameter	1 $\frac{11}{16}$ "
Bulb	ST-14
Base—Medium 4-Pin	4-C

Operating Conditions and Characteristics:

Filament Voltage	5.0	5.0	5.0 Volts
A-C Voltage per Plate (RMS)	350	400	550 Volts
D-C Output	125	110	135* Ma. Max.

NOTE: For rectifier curve data see Page 155.

*This rating is permissible only with filter circuits having an input choke of at least 20 h. If desired, a condenser of not more than 0.1 μ f may be used across the input of the filter.

CIRCUIT APPLICATION

Sylvania 80 is a full-wave vacuum type rectifier for use in supplying direct current power from an a-c power supply line.

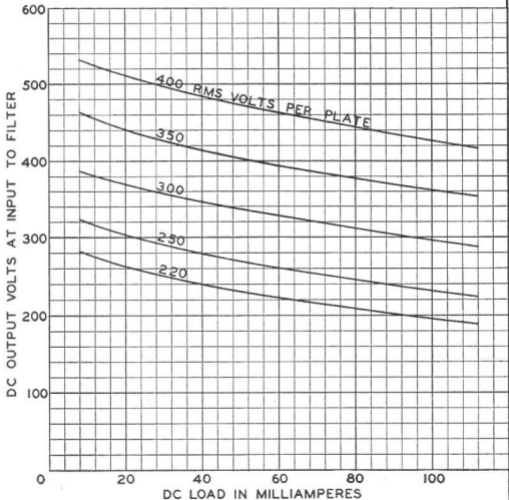
The filament employed in the 80 is of the oxide coated type. This filament is operated on alternating current from a five volt winding on the power transformer. The filament voltage should be held close to its rated value of 5 volts. Since the filament current is rather high (2.0 amperes) it is necessary to employ wire of the proper current carrying capacity. It is unnecessary to provide the filament winding with a center tap for most applications.

The power transformer for use in connection with the 80 tube must be provided with two windings, a filament winding as noted in the preceding paragraph and a high voltage center tapped winding.

The a-c input voltage per plate must be limited to 350 volts r-m-s when the maximum d-c load current of 125 milliamperes is drawn from the tube if a capacitive input to the filter is used. If load requirements are such that the d-c current will never exceed 110 milliamperes, the transformer may be designed to supply an input voltage of 400 r-m-s volts per plate, with a capacitive input to the filter. It is possible to increase the load current to 135 milliamperes and the input voltage to 550 r-m-s volts per plate if a filter circuit using a choke of at least 20 henries is employed with no input condenser or a condenser of 0.1 mfd. maximum capacity.

TYPES 80, 5Y3G, 5Y4G

$E_f = 5.0$ VOLTS AC.
4 MFD. CONDENSER INPUT TO FILTER



TYPES 80, 5Y3G, 5Y4G

$E_F = 5.0$ VOLTS AC.

CHOKE INPUT TO FILTER

