

FERRANTI

FULL WAVE RECTIFIER

A directly heated, high vacuum full wave rectifier, designed for use in equipments where a large output is required.

PHYSICAL DETAILS.

Base	...	...	International Octal.
Bulb	...	...	Clear.
Max. Overall Length	...	...	135 mm. (5 $\frac{1}{2}$ in.)
Max. Seated Height	...	...	121 mm. (4 $\frac{3}{4}$ in.)
Max. Diameter (Bulb)	...	...	52 mm. (2 $\frac{1}{16}$ in.)
Mounting Position	...	...	Vertical, base down ; or horizontal with pins 1 and 4 in vertical plane.

BASE CONNECTIONS.

Pin 1—No Connection.	Pin 5—No Pin.
Pin 2—Filament.	Pin 6—Anode 1.
Pin 3—No Pin.	Pin 7—No Pin.
Pin 4—Anode 2.	Pin 8—Filament.

FILAMENT.

Filament Voltage	...	5.0 volts.
Filament Current	...	2.0 amps.

RATINGS.

Max. Peak Anode Current per anode		650	mA.
Max. P.I.V. (no load)	2100	2400	2800 volts.
Max. Rectified Current (Capacitor Input)	250	175	150 mA.
Max. Rectified Current (Choke Input)	250	250	175 mA.
Min. Choke Inductance	5	5	10 Henries
Delay for H.T. Switching			see Note *

TYPICAL OPERATION.

CAPACITOR INPUT.

‡R.M.S. Input voltage	...	750	850	1000 volts.
†‡Min. Supply Impedance	...	250	500	575 ohms.
Rectified Current	...	250	150	150 mA.
Reservoir Capacitor	...	4	4	4 μ F.

CHOKES INPUT.

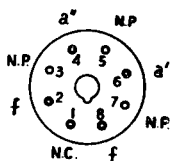
‡R.M.S. Input Voltage	...	850	1000 volts.
Rectified Current	...	250	175 mA.
Min. Input Choke Inductance	...	5	10 Henries

*Under certain operating conditions which are shown on the graph overleaf it is necessary to delay application of the Anode Voltage until the filament has reached the required temperature. Neglect of this precaution will lead to early failure.

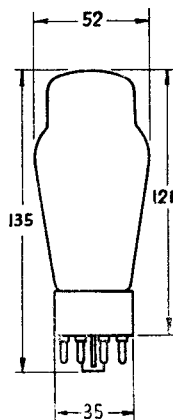
††An input capacitor larger than 4 μ F is employed the anode supply impedance should be increased to limit the peak anode current to the maximum specified under "Ratings."

‡Each Anode.

5R4GY



**Base
Connections
Underside View
of Base**



All Dimensions
shown are in
Millimetres
(max.).

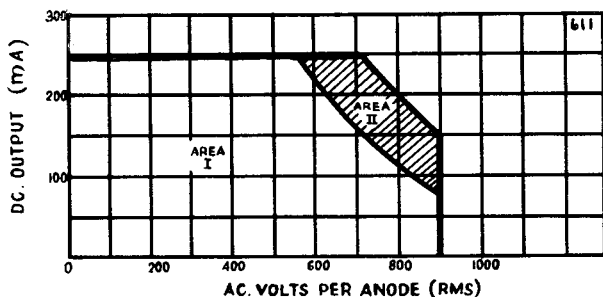


5R4GY



OPERATION CHARACTERISTICS

CAPACITOR INPUT TO FILTER



AREA I: FILAMENT & ANODE VOLTAGE MAY BE APPLIED SIMULTANEOUSLY.

AREA II: FILAMENT SHOULD BE ALLOWED TO REACH OPERATING TEMPERATURE BEFORE ANODE VOLTAGE IS APPLIED, FOR AVERAGE CONDITIONS, THE DELAY IS APPROXIMATELY 10 SECONDS.

