



FULL WAVE RECTIFIER

A directly heated high vacuum full wave rectifier.

PHYSICAL DETAILS

Base	...	...	...	International Octal.
Bulb	...	...	...	Clear.
Max. Overall Length	...	...	...	84 mm. (3 $\frac{3}{8}$ in.).
Max. Seated Height	...	...	...	70 mm. (2 $\frac{7}{8}$ in.).
Max. Diameter (Base)	...	...	...	33 mm. (1 $\frac{1}{8}$ in.).
Mounting Position	...	...	...	Vertical, base down; or horizontal with pins 2 and 4 in vertical plane.

BASE.

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 Inverse Voltage	...	1400 volts.
R.M.S. Anode Supply Voltage	...	See graph on Page 2.
Rectified Current	...	See graph on Page 2.
†Min. Limiting Resistance	...	See graph on Page 3.
‡Max. Peak Anode Current	...	440 mA.
§†Max. Hot-switching Transient Anode Current	...	2.5 amps.

TYPICAL OPERATION.

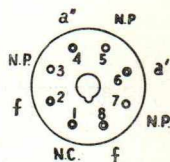
	Capacitor- Input.	Choke Input.
*R.M.S. Input Voltage	350	500 volts.
Filter-Input Capacitor	20	— μ F.
Filter Input Choke	—	10 Henries.
*Min. Supply Impedance	50	— ohms.
DC. Output Voltage at Input to Filter (approx.)	360	380 volts.
DC. Output Current	125	125 mA.

*For supply frequency 25 to 1000 c/s.

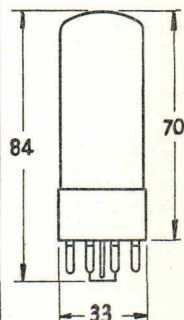
†Each Anode.

§For maximum duration of 0.2 sec.

5Y3GT



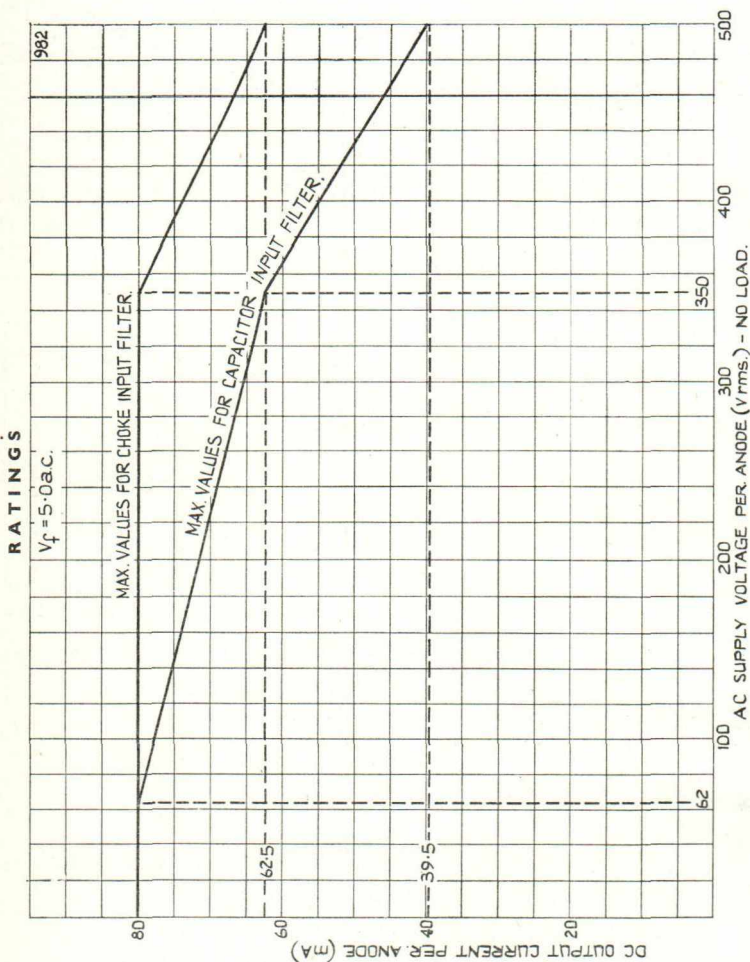
Base
Connections
Underside View
of Base



All dimensions
shown are in
millimetres
(max.).



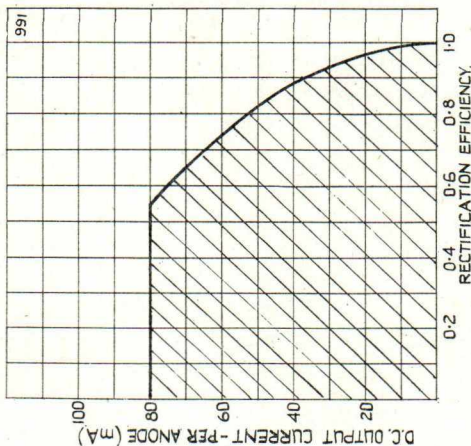
5Y3GT



RATINGS (with Capacitor-Input Filter)

Max. transient peak anode current = 2.5A

Max. steady static peak anode current = 440mA



$$\text{Rectification Efficiency} = \frac{V_{\text{out}}}{\sqrt{2} V_{\text{in}} (\text{rms})}$$

where

V_{out} = DC output (at input to filter)

$V_{\text{in}} (\text{rms})$ = AC supply volts (rms) per anode

NO LOAD.

TYPICAL OPERATING CHARACTERISTICS

