

Osram Valves

Made in England.



Illustrating Type GU1

Maximum Dimensions :
Overall length (including pins)
110 m/m.
Diameter of bulb 45 m/m.

TYPE GU1 TYPE GU5 HOT CATHODE MERCURY VAPOUR RECTIFYING VALVES (Half Wave).

The OSRAM GU1 and GU5 are half wave Mercury Vapour-filled Rectifiers suitable for the supply of rectified current up to 250 milliamps without the necessity for the application of high A.C. voltages. Under normal conditions the bulb is filled with a blue glow due to ionisation of the mercury vapour. By virtue of the gas-filling the impedance of the rectifier is low which ensures high efficiency of rectification and results in a practically constant voltage drop across the valve of 15 volts, while the discharge is maintained.

Two such rectifiers may be used in a bi-phase circuit to give full wave rectification if desired, whereby a total rectified current of up to 500 milliamps may be obtained.

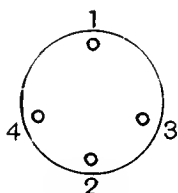
Type GU1 is suitable for anode voltages up to 1,000 max.; type GU5 will withstand voltages up to 1,500 max.

CHARACTERISTICS.

	GU1	GU5
Filament Volts	4.0	4.0
Filament Current	3.0 amps. approx.	3.0 amps. approx.
Anode Volts (R.M.S.)	Up to 1,000	Up to 1,500
Max Rectified Current (with Delayed Switching of Anode voltage)*	250 m.a.	250 m.a.

* See operating conditions below.

For prices see
pages 126-129



View looking on
underside of base.

GU1
BASE, 4-pin.
Pin 1: Anode
2: —
3: Filament
4: Filament

GU5
BASE, 4-pin.
Pin 1: —
2: —
3: Filament
4: Filament
Top Cap: Anode

OPERATING CONDITIONS.

On no account must the H.T. voltage be applied to the valve at the same time as application of filament voltage. The filament should be switched on from half to one minute before the H.T. in every case. Similarly the H.T. should be switched off before or at the same time as the filament.

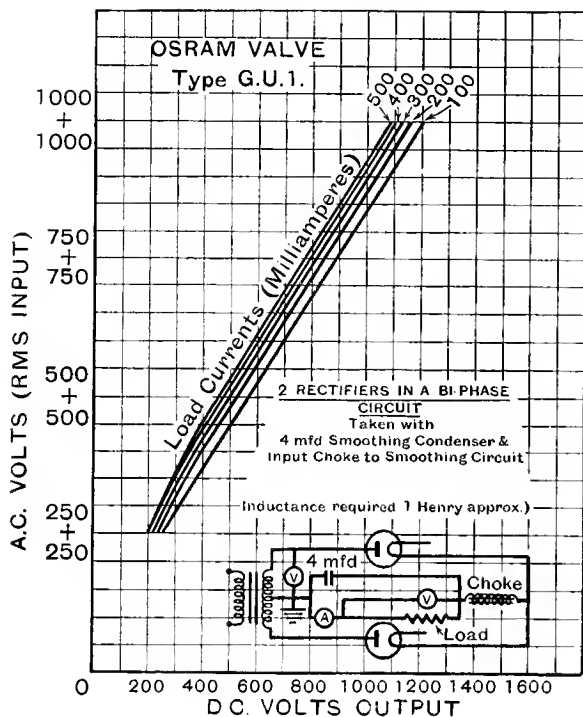
In order to ensure reliable life operation it is important that after transit, or following a period of disuse, the filament should be run at operating temperature for 15 minutes before the anode voltage is applied.

A positive voltage greater than 15 should never be applied to the anode without the addition of a series resistance to limit the current.

Variations in output current may be obtained by the use of a potentiometer or series resistance. On no account must the output be regulated by controlling the filament voltage.

When used under the maximum rectified current conditions a choke input to the filter circuit is recommended of values as shown opposite.

TYPE GU1



TYPE GU5

AVERAGE
CHARACTERISTIC CURVES.

