

HALF WAVE MERCURY VAPOUR RECTIFIER

GENERAL

The EHT.15 is a directly heated high voltage half wave rectifier of the hot mercury vapour type and is capable of rectifying up to 30 kW of power at a D.C. voltage of 10,000 - 12,000. Owing to the very low and constant voltage drop in the rectifier good regulation is obtained with high efficiency. This valve must be operated in an inverted position.

RATING

Filament Voltage (volts)	V_f	4.0
Filament Current (amps)	I_f	15
Maximum Inverse Peak Anode Voltage (kV)	P.I.V.	20
Peak Anode Current (amps)	$I_a(pk)$	15
Maximum Mean Anode Current (amps)	$I_a(mean)$	3.0
Circumambient Temperature ($^{\circ}C$)		$10^{\circ} - 50^{\circ}$
Cathode Heating Delay (secs)		60

DIMENSIONS

Maximum Overall Length (mm)	425
Maximum Diameter (mm)	150

APPLICATION

Standard smoothing circuits may be used with the valves, whether operated singly or in pairs for full wave rectification. The latter arrangement is recommended as being more efficient. To guard against damage from overload it is necessary to include a fuse as a connexion to the anode cap and this should be mounted as close to the cap as possible. To avoid the possibility of flash - back on reverse voltage, the temperature of the rectifier should never be allowed to exceed $50^{\circ}C$.

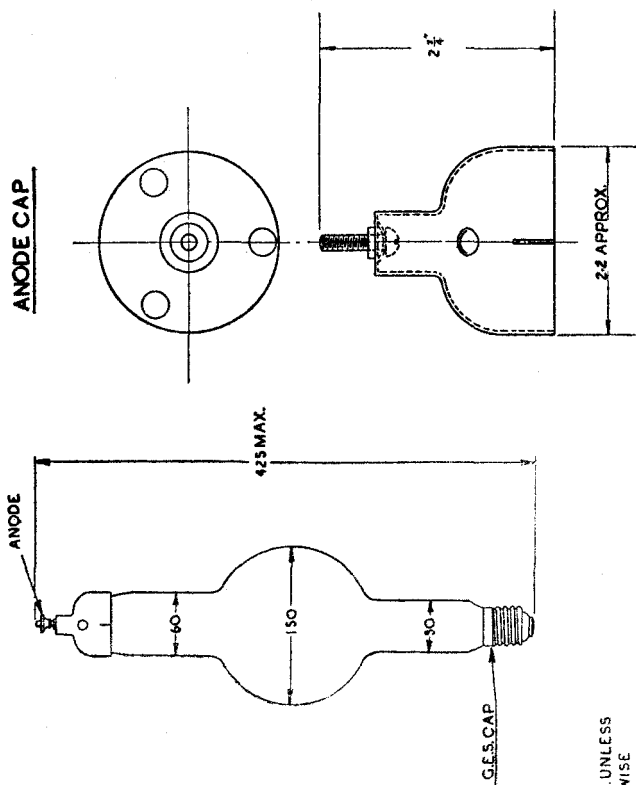
For this reason it is essential that the valve be mounted in a cool well - ventilated position, and if the air temperature is liable to reach a high value a draught from an ordinary domestic fan should be applied to the bulb. The cathode voltage should be 4.0v. and not be allowed to fall below this value.

IMPORTANT NOTE

It is important that the cathode be allowed to attain full operating temperature before the H.T. voltage is applied to the Anode. When first placed into service, it is essential that the filament is run at its rated value for 15 mins. before applying H.T. to anode and thereafter a delay of at least a minute should elapse before the anode supply is switched on. When switching off, disconnect the H.T. supply before the cathode supply.

When rectifiers are kept as spares it is recommended that they be run under operating conditions at frequent intervals to ensure that they have suffered no deterioration through being kept in stock.

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ALL DIMS. IN mm. UNLESS
STATED OTHERWISE