ESU872

HALF WAVE MERCURY VAPOUR RECTIFIER

GENERAL

This directly heated rectifier is designed to withstand high peak inverse voltages and to conduct at relatively low applied voltages.

RATING

Filament Voltages (volts)	V_f	5.0
Filament Current (amps)	I_f	7.5
Maximum Peak Inverse Anode Voltage (KV)	P.I.V.	10
Peak Anode Current (amps)	$I_{a(pk)}$	5
Maximum Mean Anode Current (amps)	$I_{a(mean)}$	1.25
Condensed Mercury Temperature (°C)		20-60
Cathode Heating Delay Time (secs)		60
Voltage Drop (volts)		15

DIMENSIONS

Maximum Overall Length	(inches)	8½
Maximum Diameter	(inches)	2.5/16

BASE Jumbo - filament

TOP CAP - Anode

APPLICATION

When a mercury vapour rectifier is first placed in service, its filament should be operated at normal voltage for approximately 15 minutes without anode voltage in order to distribute the mercury properly. This procedure need not be repeated unless, during subsequent handling, the mercury is spattered on to the filament and anode.

Mount the rectifier vertically in a well-ventilated position as the bulb becomes hot during continuous operation. To avoid the possibility of flash-back on reverse voltage, the temperature of the rectifier bulb at the point where the mercury vapour condenses should not be allowed to exceed 60°C. Where there is a possibility of the air temperature rising considerably, an air draught cooling should be used.

Unless the valve is operated on very light loads, the filament must be allowed to attain its full operating temperature before the anode voltage is applied, and the Cathode Delay Time should elapse before the anode supply is switched on. A delay switch is recommended for full load operation (see DLS range of swich The filament supply should not be switched off before the H.T. supply.

Associated Electrical Industries Limited
Electronic Components Division
Tel.: GERRARD 9797

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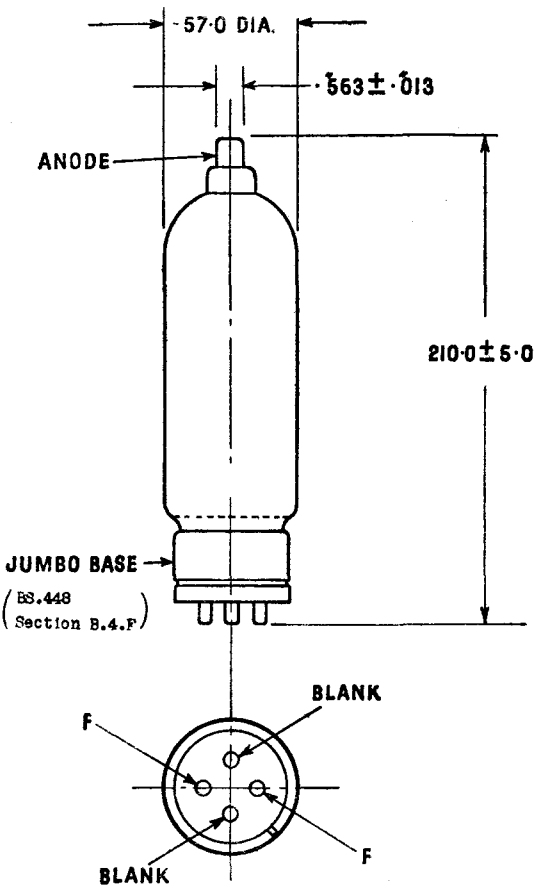

UNDERSIDE VIEW OF BASE

ALL DIMENSIONS IN M.M. UNLESS OTHERWISE STATED

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