MAZDA

ESU.872

ESU. BA 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. RATINS Filament Voltages (volts) Vf 5.0 Filament Current (amps) If 7.5 Maximum Peak Inverse Anode Voltage (KV) P.I.V. 10 Peak Anode Current (amps) Ia(pk) 5 Maximum Mean Anode Current (amps) Ia(mean) 1.25 Condensed Mercury Temperature (CC) 20-60 Cathode Heating Delay Time (secs) 60 Voltage Drop (volts) 15 DIMENSIONS 88 Maximum Overall Length (inches) 88 Maximum Diameter (inches) 88 Ment a mercury vapour rectifier is first placed in service, its filament should be operated at normal voltage for approximately is marcury report. TOP CAP - Anode APPLICATION Ment a mode coltage		And the second second second		
tages. <u>RATINS</u> Filament Voltages (volts) V ₁ 5.0 Filament Current (amps) I ₁ 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 (pk) 1.25 Condensed Mercury Temperature (°C) 2C-60 Cathode Heating Delay Time (secs) 60 Voltage Drop (volts) 15 <u>DIMENSIONS</u> Maximum Overall Length (inches) 85 Maximum Overall Length (inches) 85 Maximum Diemeter (inches) 85 Maximum D				
Filament Voltages (volts) Vf 5.0 Filament Current (amps) If 7.5 Maximum Peak Inverse Anode Voltage (KV) P.I.V. 10 Peak Anode Current (amps) Ia(pk) 5 Maximum Mean Anode Current (amps) Ia(pk) 5 Maximum Mean Anode Current (amps) Ia(pk) 5 Condensed Mercury Temperature (°C) 20-60 Cathode Heating Delay Time (secs) 60 Voltage Drop (volts) 15 DIMENSIONS 84 Maximum Overall Length (inches) 84 Maximum Diameter (inches) 84 </td <td colspan="3"></td>				
Filament Current (amps) If 7.5 Maximum Peak Inverse Anode Voltage (KV) P.I.V. 10 Peak Anode Current (amps) Is(pk) 5 Maximum Mean Anode Current (amps) Is(pk) 5 Condensed Mercury Temperature (°C) 20-60 Cathode Heating Delay Time (secs) 60 Voltage Drop (volts) 15 DIMENSIONS 83 Maximum Overall Length (inches) 83 Maximum Dismeter (inches) 83 Maximum Dismeter (inches) 83 Maximum Dismeter (inches) 83 Meximum Overall Length (inches) 83 83 Maximum Dismeter (inches) 83 Meximum Overall Length (inches) 83 83 Maximum Dismeter (inches) 83 Maximum Dismeter (inches) 83 Meximum Dismeter (inches) 83 Maximum Dismeter (inches) 83 Maximum Dismeter (inches) 83 Maximum Dismeter (inches) 83 Maximum Dismeter (inches) 83 </td <td>RATING</td> <td></td> <td></td>	RATING			
Maximum Peak Inverse Anode Voltage (KV) P.I.V. 10 Peak Anode Current (amps) Ia(pk) 5 Maximum Mean Anode Current (amps) Ia(pk) 5 Maximum Mean Anode Current (amps) Ia(pk) 1.25 Condensed Mercury Temperature (°C) 20-60 Cathode Heating Delay Time (secs) 60 Voltage Drop (volts) 15 DIMENSIONS 84 Maximum Overall Length (inches) 84 Maximum Diameter (inches) 84				
Peak Anode Current (amps) Ia(pk) 5 Maximum Mean Anode Current (amps) Ia(mean) 1.25 Condensed Mercury Temperature (°C) 20-60 Cathode Heating Delay Time (secs) 60 Voltage Drop (volts) 15 DIMENSIONS 82 Maximum Overall Length (inches) 84 Maximum Dismeter (inches) 85 Maximum Dismeter (inches) 85 Dimb				
Maximum Mean Anode Current (amps) Ia(mpan) 1.25 Condensed Mercury Temperature (°C) 20-60 Cathode Heating Delay Time (secs) 60 Voltage Drop (volts) 15 DIMENSIONS 83 Maximum Overall Length (inches) 84 Maximum Diemeter (inches) 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 a node 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. Nount the rectifier vertically in a well-ventilated position as the hulb becomes hot during continuous operation. To avoid the possibility of flash-back on reverse voltage, the tamperature of the cooling should be used. Unless the valve is operated on very light loads, the filament must be allowed to exceed 60°C. Where there is a possib- Wount the rectifier wertically in a well-ventilated position as the bulb becomes hot during continuous			1	
Condensed Mercury Temperature (°C) 20-60 Cathode Heating Delay Time (secs) 60 Voltage Drop (volts) 15 <u>DIMENSIONS</u> Maximum Overall Length (inches) 85 Maximum Dismeter (inches) 85 <u>Maximum Dismeter (inches)</u> 2.5/16 <u>BASE</u> Jumbo - filsment <u>TOP CAP</u> - Anode <u>APPLICATION</u> 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 headling, the mercury is spattered on to the filament and anode. Nount the rectifier vertically in a well-ventilated position as the hulb becomes hot during continuous operation. To avoid the possibility of flash-back on reverse voltage, the temperature of the rectifier bulk at the point where the mercury upour condenses should not be allowed to exceed 60°C. Where there is a possib- filty of the sit 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 of before the H.T.		-a(pk) Is(maan)	- 1	
Voltage Drop (volts) 15 DIMENSIONS 84 Maximum Overall Length (inches) 84 Maximum Diemeter (inches) 84 Maximum Diemeter (inches) 84 Maximum Diemeter (inches) 84 Maximum Diemeter (inches) 84 BASE Jumbo - filament 2.5/16 TOP CAP - Anode 4 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 incorder and the 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 bult at the point where the mercury upour condenses should not be allowed to exceed 60°C. Where there is a possibility of the sit temperature rising considerably, an air draught cooling should be used. Unlass 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 bore 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 of before the H.t.	Condensed Mercury Temperature (°C)		20-60	
DIMENSIONS Maximum Overall Length (inches) Maximum Dismeter (inches) BASE Jumbo - filsment TOP CAP - Anode APPLICATION When a mercury vapour rectifier is first placed in service, its filsment 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 headling, 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 bulk at the point where the mercury vepour condenses should not be allowed to exceed 60°C. Where there is a possib- fility of the sit 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 epplied, and the Cathode Delay Time should is recommended for full load operation (see DLS range of switch is recommended for full load operation (see DLS range of switch the filament supply should not be switched of before the H.T.	Cathode Heating Delay Time (secs)		60	
Maximum Overall Length (inches) 84 Maximum Dismeter (inches) 84 Maximum Dismeter (inches) 2.5/16 BASE Jumbo - filsment 2.5/16 TOP CAP - Anode APPLICATION Mena 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. Wount 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 upour condenses should not be allowed to exceed 60°C. Where there is a possibility of the sit 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 bore 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 of before the H.t.	Voltage Drop (volts)		15	
<pre>Maximum Dismeter (inches) 2.5/16 BASE Jumbo - filsment TOP CAP - Anode APPLICATION When a mercury vapour rectifier is first placed in service, its filsment 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. Wount 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 upour condenses should not be allowed to exceed 60°C. Where there is a possib- fility of the sit 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 of the filament be filament be filament supply should not be allowed to attain for the filament before the H.T.</pre>	DIMENSIONS			
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 headling, the mercury is spattered on to the filament and anode. Wount the rectifier vertically in a well-ventilated position as the hulb 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 vepour condenses should not be allowed to exceed 60°C. Where there is a possib- fility of the sit 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 is recommended for full load operation (see DLS range of switch is recommended for full load operation (see DLS range of switch the filament supply should not be switched off before the H.T.				
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 possib- fility 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 is arcommended for full load operation (see DLS range of swich The filament supply should not be switched on f before the H.T.	BASE Jumbo - filament			
When a mercury vapour rectifier is first placed in service, its filament should be operated at normal voltage for approximately 15 minutes without ancde voltage in order to distribute the mercury properly. This procedure need not be repeated unless, during subsequent headling, the mercury is spattered on to the filament and ancde. 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 vepour condenses should not be allowed to exceed 60°C. Where there is a possib- lity 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 epplied, and the Cathode Delay Time should elapse before the an de 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.	TOP CAP - Anode			
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 hulb becomes hot during continuous operation. To avoid the possibility of flash-back on reverse voltage, the tamperature of the rectifier bulb at the point where the mercury vepour condenses; should not be allowed to exceed 60°C. Where there is a possib- filty of the sit 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 explied, and the Cathode Delay Time should is recommended for full load operation (see DLS range of swich the filament supply should not be switched on. A delay switch	APPLICATION			
the hulb 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 vepour condenses should not be allowed to exceed 60°C. Where there is a possib- lity of the sir 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.	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			
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.	the hulb 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 vepour condenses should not be allowed to exceed 60°C. Where there is a possib- lity of the air temperature rising considerably, an air draught			
	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.			

February 1954

RADIO DIVISION

issue 2/5

THE EDISON SWAN ELECTRIC COMPANY LTD.

Issue 2/5 February 1954 RADIO DIVISION THE EDISON SWAN ELECTRIC COMPANY LTD.

ALL DIMENSIONS IN M.M. UNLESS OTHERWISE STATED

UNDERSIDE VIEW OF BASE



MAZDA

45U.8N

ESU.872

HALF WAVE MERCURY VAPOUR RECTIFIER