MERCURY-VAPOR RECTIFIER

DESCRIPTION

This half-wave, mercury-vapor rectifier is designed to withstand high peak inverse voltages and to conduct at low applied voltages. The construction minimizes the danger of bulb cracks caused by corona discharge. An edgewise-wound ribbon filament provides a large emission reserve and improved life.

Two 866-A's operating in a full-wave rectifier are capable of delivering to the input of a choke-input filter a rectified voltage of 3180 volts at 0.5 ampere with good regulation.

TECHNICAL INFORMATION

These data are for reference only. For design information refer to specifications.

GENERAL CHARACTERISTICS

Number of electrodes			2	
Electrical				
Cathode—Filamentary	**Minimum**	**Bogey**	**Maximum**	
Filament voltage	2.37	2.5	2.62	volts
Filament current, approximate		5.0	5.4	amperes
Heating time, typical	15			seconds
Peak voltage drop, typical		15		volts
Mechanical				
Type of cooling		convection		
Equilibrium condensed-mercury temperature rise over ambient				
No load, approximate		26C		
Full load, approximate		33C		
Net weight, approximate		3	ounces	
Shipping weight, approximate		3	pounds	
Mounting position		vertical, base down		

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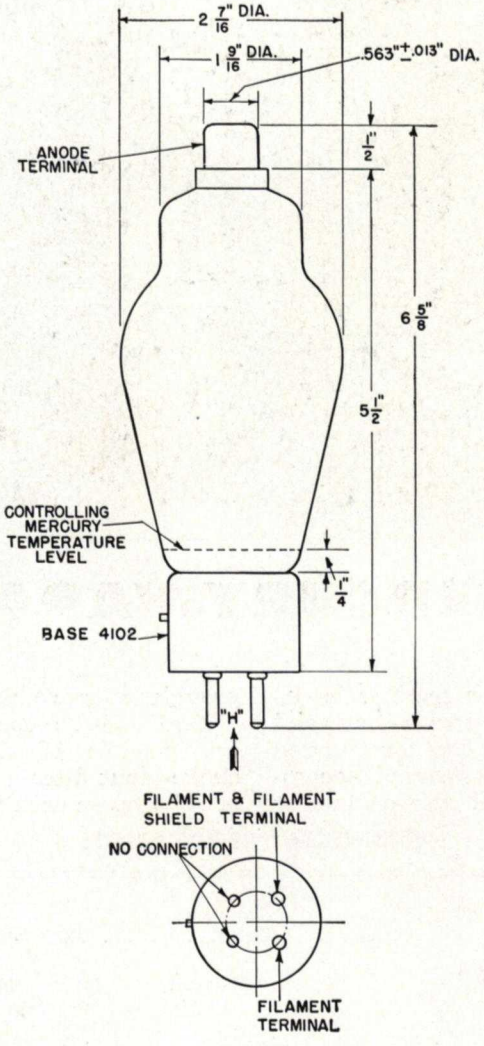
Supersedes ETX-175 dated 5-46

TECHNICAL INFORMATION (CONT'D)

MAXIMUM RATINGS

Maximum peak inverse anode voltage			
150 cycles per second or less	2000	10,000	volts
Condensed mercury temperature	25–70	25–60	centigrade
1000 cycles per second or less		5000	volts
Condensed mercury temperature		25–70	centigrade
Maximum cathode current			
Instantaneous	2.0	1.0	amperes
Average	0.5	0.25	amperes
Surge (maximum duration 0.1 second)	20	20	amperes
Maximum averaging time	30	30	seconds



GL-866-A OUTLINE

K-6966978 9-23-44

Electronics Department

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Schenectady, N. Y.