

## MERCURY-VAPOR RECTIFIER

### DESCRIPTION

The GL-857-B is a half-wave, mercury-vapor rectifier tube for use in the high voltage field. The low voltage drop characteristic inherent in mercury-

vapor tubes, together with other features of design and construction assure maximum efficiency of operation in many different rectifier applications.

### TECHNICAL INFORMATION

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

#### GENERAL CHARACTERISTICS

Number of electrodes.....	2
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##### Electrical

Cathode—Filamentary	
Filament voltage.....	5.0 volts
Filament current, approximate.....	30.0 amperes
Heating time, typical.....	1 minute
Peak voltage drop, typical.....	15 volts

##### Mechanical

Type of cooling.....	convection or forced-air
Net weight, approximate.....	3½ pounds
Shipping weight, approximate.....	10 pounds
Mounting position.....	vertical, base down

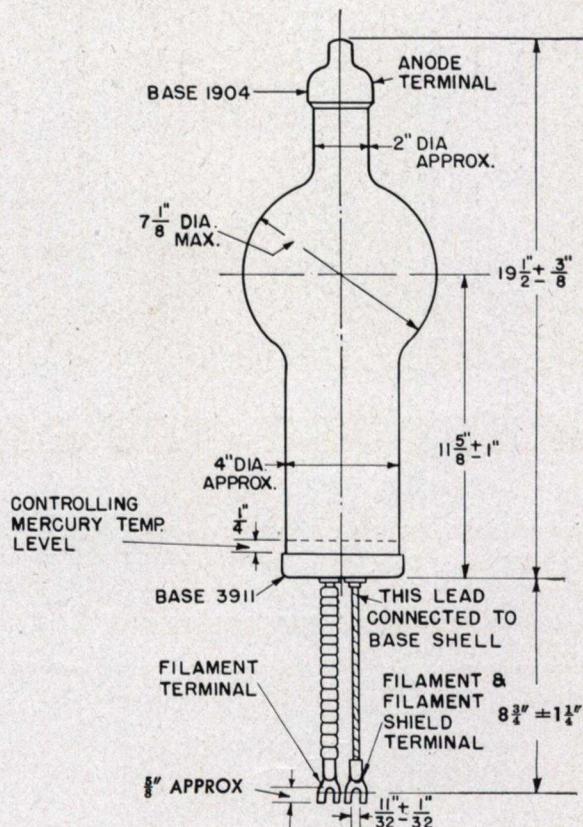
  
*Electronic*  
TUBE

**GENERAL**  **ELECTRIC**

## TECHNICAL INFORMATION (CONT'D)

## MAXIMUM RATINGS

Maximum peak inverse anode voltage, 150 cycles or less.....	10,000 volts.....	22,000 volts
Type of cooling.....	Convection.....	Forced-air
Corresponding mercury temperature.....	25-65 centigrade.....	30-40 centigrade
<b>Maximum anode current</b>		
Instantaneous, 25 cycles and above		
In-phase operation.....	20 amperes	
Quadrature operation.....	40 amperes	
<b>Average</b>		
In-phase operation.....	5 amperes	
Quadrature operation.....	10 amperes	
Surge, for design only.....	400 amperes	
Duration of surge current.....	0.2 second	
Maximum time of averaging current.....	30 seconds	
Recommended temperature, condensed mercury.....	35 ± 5	centigrade



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