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

Electrical

Cathode—Filamentary
Filament voltage .................................................. 5.0 volts
Filament current, approx ........................................ 30.0 amperes
Heating time, typical .......................................... 1 minute
Peak voltage drop, typical .................................... 12 volts

Mechanical

Type of cooling .................................................... convection or forced air
Net weight, approx .............................................. 3 1/2 pounds
Shipping weight, approx .................................... 10 pounds
Mounting position ............................................. vertical, base down
TECHNICAL INFORMATION (CONT'D)

MAXIMUM RATINGS

Maximum peak inverse anode voltage
Type of cooling .................................................. Convection .... Forced-air
150 cycles or less ............................................. 10,000 volts .... 22,000 volts
Corresponding mercury temperature ....................... 25 - 65 centigrade .... 30 - 40 centigrade

Maximum anode current
Instantaneous 25 cycles and above
In-phase operation .............................................. 20 amperes
Quadrature operation ......................................... 40 amperes

Average
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