GL-6855

THYRATRON

TRIODE TYPE
NEGATIVE CONTROL CHARACTERISTICS

QUICK-HEATING CATHODE
INERT-GAS AND MERCURY-VAPOR TYPE

DESCRIPTION AND RATING

The GL-6855 is a three-electrode inert-gas and mercury-vapor thyatron with negative control characteristics for use in all control applications. The GL-6855 combines the desirable temperature characteristic of gas tubes, maximum ratings over a wide temperature range, with the long life of mercury tubes. Another feature useful in industrial applications is a quick-heating filamentary-type cathode - only 15 seconds is required for the cathode to reach operating temperature.

TECHNICAL INFORMATION

GENERAL

Electrical

Cathode - Filamentary
Filament Voltage .............................................. 2.5 Volts
Filament Current at 2.5 Volts ................................ 6.3 ± 0.8 Amperes
Heating Time ....................................................... 15 Seconds

Anode to Control-Grid Capacitance ......................... 3 uuf

Deionization Time, approximate ........................... 1000 Microseconds
Ionization Time, approximate ............................... 10 Microseconds
Anode Voltage Drop .............................................. 8 Volts
Critical Grid Current ........................................... 10 Microamperes

Control Characteristics
Anode Voltage 100 500 1250 .................................. Volts
Grid Voltage -1.5 -3.5 -5.2 ................................. Volts

Mechanical

Mounting Position - Vertical, Base Down
Equilibrium Condensed-Mercury Temperature Rise Above Ambient .............................................. 30 Ounces
Net Weight, maximum ........................................... 3 Ounces

MAXIMUM RATINGS, Absolute Values

Maximum Peak Anode Voltage
Inverse .............................................................. 1250 Volts
Forward ............................................................. 1250 Volts

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MAXIMUM RATINGS, Absolute Values (Cont'd)

Maximum Cathode Current

- Peak: 8.0 Amperes
- Average: 1.0 Amperes
- Maximum Averaging Time: 5 Seconds
- Fault: 80 Amperes
- Maximum Duration: 0.1 Seconds

Maximum Negative Control-Grid Voltage

- Before Conduction: 500 Volts
- During Conduction: 10 Volts

Condensed Mercury Temperature Limits: -40 to +80 °C

TUBE DEPARTMENT
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