

GL-6855

THYRATRON

TRIODE TYPE

QUICK-HEATING CATHODE

NEGATIVE CONTROL CHARACTERISTICS

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	
Net Weight, maximum . . . . .	3	Ounces

MAXIMUM RATINGS, Absolute Values

Maximum Peak Anode Voltage

Inverse . . . . .	1250	Volts
Forward . . . . .	1250	Volts

## 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

GENERAL ELECTRIC COMPANY

Schenectady 5, N. Y.

# OUTLINE-GL-6855

