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GL-6860

THYRATRON

TRIODE TYPE INERT-GAS TYPE

NEGATIVE CONTROL CHARACTERISTICS

DESCRIPTION AND RATING

The GL-6860 is a three-electrode inert-gas filled thyratron with a negative control characteristic for use in grid-control rectifier applications. The GL-6860 combines the desirable temperature characteristic of gas tubes, maximum ratings over a wide temperature range, with the long life of mercury tubes. A useful feature in industrial applications is the filamentary-type cathode which requires only one minute to reach operating temperature.

This tube is equipped with a bracket-type base for panel mounting.

TECHNICAL INFORMATION

GENERAL

Electrical

Cathode - Filamentary		
Filament Voltage	2.5	Volts
Filament Current at 2.5 Volts	21 ± 2	Amperes
Heating Time	60	Seconds
Anode to Control-Grid Capacitance	4	uuf
Deionization Time, approximate	1000	Microseconds
Ionization Time, approximate	10	Microseconds
Anode Voltage Drop	12	Volts
Critical Grid Current	10	Microamperes

Control Characteristics

Anode Voltage	100	500	1250	Volts
Grid Voltage	-0.5	-2.4	-5.8	Volts

Mechanical

Mounting Position - Vertical, Base Down		
Net Weight, maximum	8	Ounces

MAXIMUM RATINGS, Absolute Values

Maximum Peak Anode Voltage		
Inverse	1250	Volts
Forward	1000	Volts
Maximum Cathode Current		
Peak	77	Amperes
Average	6.4	Amperes
Maximum Averaging Time	6	Seconds
Fault	770	Amperes
Maximum Duration	0.1	Seconds
Maximum Negative Control-Grid Voltage		
Before Conduction	100	Volts
During Conduction	10	Volts
Commutation Factor*	0.66	
Ambient Temperature Limits	-55 to +75	C

* Commutation factor is the product of the rate of current decay in amperes-per-microsecond just prior to commutation and the rate of inverse voltage rise in volts-per-microsecond just after commutation.

TUBE DEPARTMENT

GENERAL ELECTRIC COMPANY

Schenectady 5, N. Y.

OUTLINE-GL-6860