

GL-6860

THYRATRON

TRIODE TYPE

INERT-GAS TYPE

NEGATIVE CONTROL CHARACTERISTICS

DESCRIPTION AND RATING

The GL-6860 is a three-electrode inert-gas filled thyatron 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 $\pm$ 2	Amperes
Heating Time.	60	Seconds

Anode to Control-Grid Capacitance	4	uuf
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Deionization Time, approximate.	1000	Microseconds
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Ionization Time, approximate.	10	Microseconds
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Anode Voltage Drop.	12	Volts
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Critical Grid Current	10	Microamperes
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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
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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.

OUTLINE-GL-6860

