from JETEC release #1622, April 2, 1956

GL-6856 - GL-6857

THYRATRONS

TRIODE TYPE — QUICK-HEATING CATHODE

NEGATIVE CONTROL CHARACTERISTICS — INERT-GAS AND MERCURY-VAPOR TYPE

DESCRIPTION AND RATING

These tubes are three-electrode inert-gas and mercury-vapor thyratrons with negative control characteristics for use in all control applications. They combine 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 30 seconds is required for the cathode to reach operating temperature.

The tubes are alike except for the type base used. The GL-6856 has a four-pin base for conventional socket mounting; the GL-6857 a bracket-type base for panel mounting.

TECHNICAL INFORMATION

GENERAL

Electrical

Cathode - Filamentary		
Filament Voltage	2.5	Volts
Filament Current at 2.5 Volts	16 ± 2	Amperes
Heating Time	30	Seconds
Anode to Control-Grid Capacitance	3	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	-1.0 -3.0 -5.2	Volts

Mechanical

Mounting Position - Vertical, Base Down		
Equilibrium Condensed-Mercury Temperature Rise Above Ambient	25	
Net Weight, maximum	7	Ounces

MAXIMUM RATINGS, Absolute Values

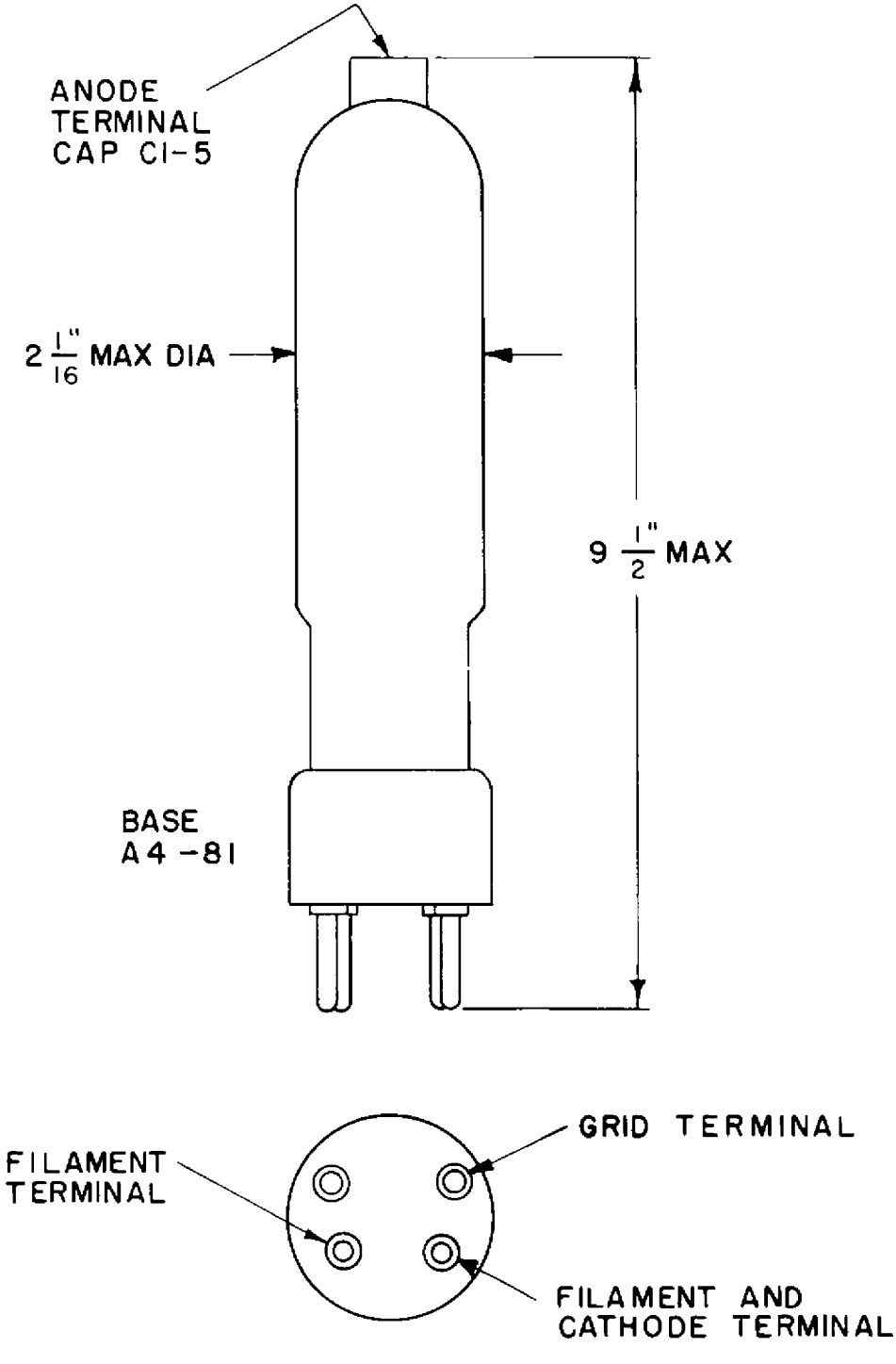
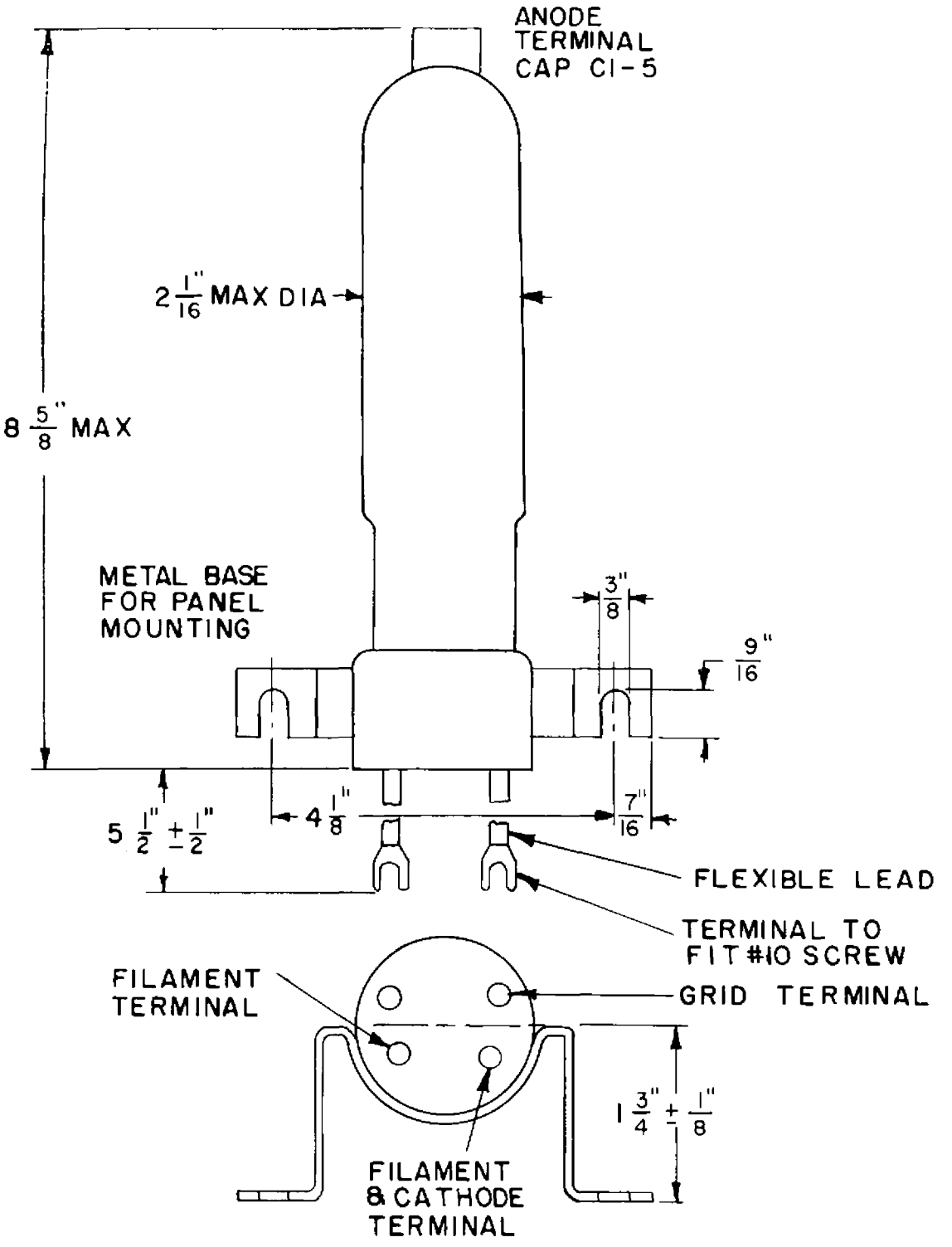
Maximum Peak Anode Voltage				
Inverse	1500	1500		Volts
Forward	1500	1500		Volts
Maximum Cathode Current				
Peak	30	50		Amperes
Average	4.0	2.5		Amperes
Maximum Averaging Time	5.0	5.0		Seconds
Fault	400	400		Amperes
Maximum Duration	0.1	0.1		Seconds
Maximum Negative Control-Grid Voltage				
Before Conduction			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-6856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