THYRATRON

DESCRIPTION

The GL-2050 is a small, double-grid, inert-gas-filled thyratron designed for grid-controlled rectifier service. The control characteristic is independent of ambient temperature over a wide range. The tube is not appreciably affected by line-voltage surges because of the low grid-to-anode capacitance. High sensitivity, the result of low grid current which allows the use of high resistance in the grid circuit, permits operation of the GL-2050 thyratron from a vacuum-type phototube.

TECHNICAL INFORMATION

These data are for reference only. For design information refer to specifications.

GENERAL CHARACTERISTICS

Number of electrodes	4	
Electrical		
Cathode—Indirectly heated type		
Voltage	6.3	volts
Current, approx	0.6	ampere
Heating time, minimum	10	seconds
Peak voltage drop, approx	8	volts
Grid resistors*		
Minimum	0.01	megohm
Maximum	10	megohms
Anode to control-grid capacitance, approx	0.26	micromicrofarad

**When this tube is operated with an alternating anode voltage and a high value of grid-circuit resistance, the grid-anode capacitance should be made as small as possible by placing the grid resistor directly at the socket terminal, by connecting pins 4 and 8 together at the socket, and by using a close fitting bulb shield connected to the cathode terminal.*

Electronic TUBE

GENERAL ELECTRIC

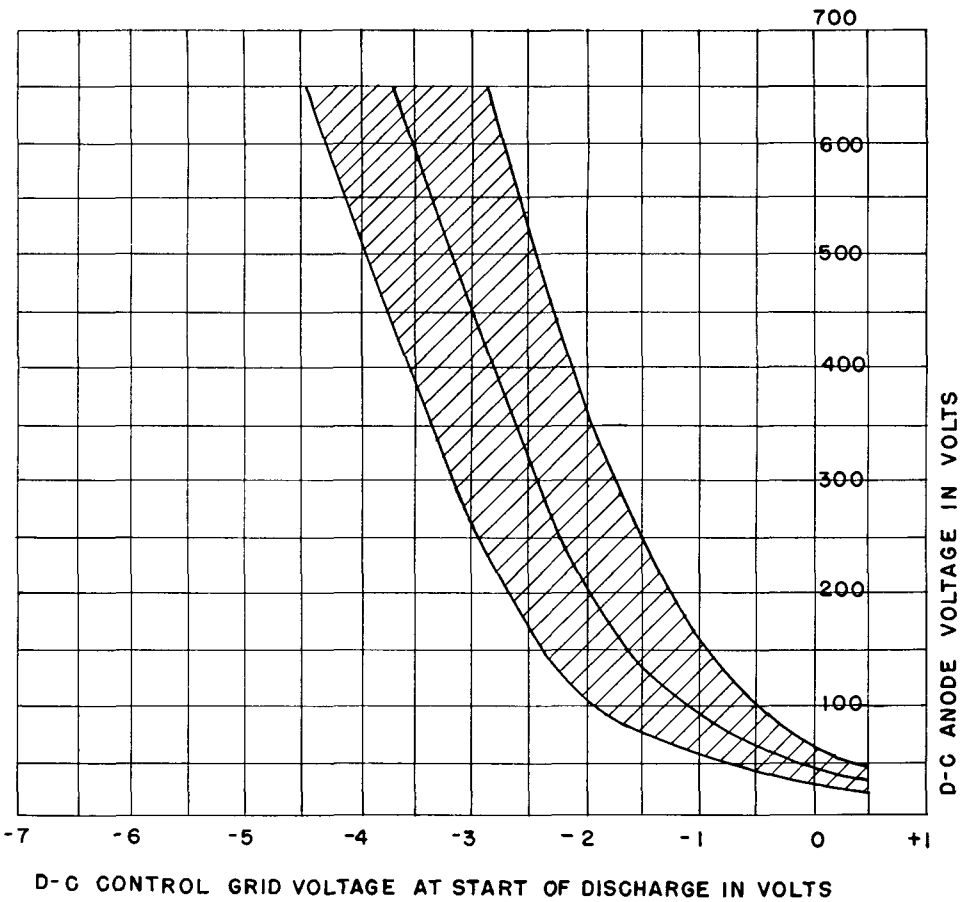
TECHNICAL INFORMATION (CONT'D)

Mechanical

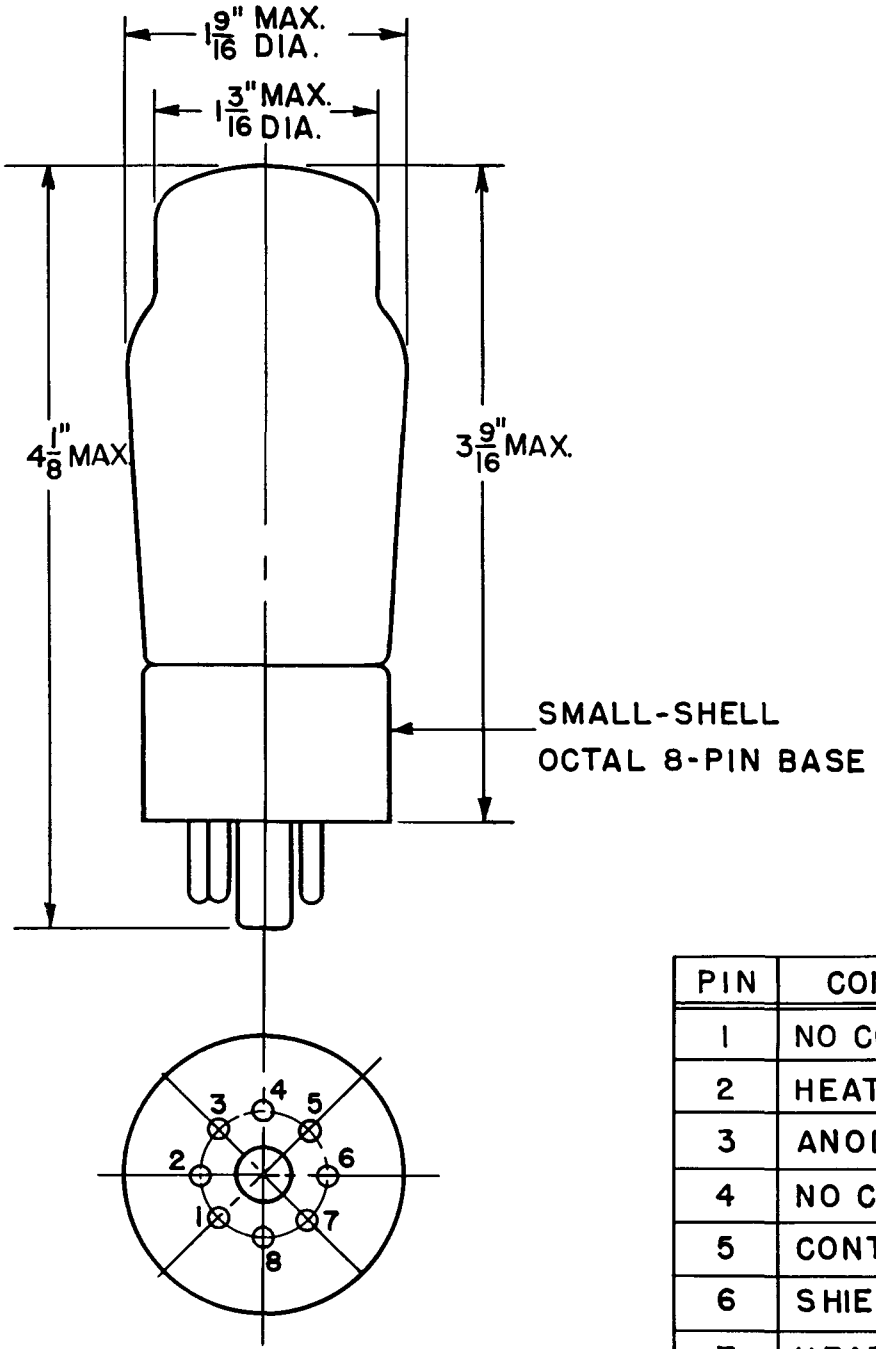
Net weight, approx	2	ounces
Shipping weight, approx	3	pounds
Operating position		vertical or horizontal

MAXIMUM RATINGS

Maximum peak anode voltage		
Inverse	1300	volts
Forward	650	volts
Shield-grid voltage	−100	volts
Control-grid voltage	−100	volts
Maximum anode current		
Instantaneous	500	milliamperes
Average	100	milliamperes
Maximum time of averaging current	30	seconds



GL-2050
TYPICAL CONTROL CHARACTERISTICS
SHADED AREA SHOWS RANGE OF CHARACTERISTICS
SHIELD GRID CONNECTED TO CATHODE



OUTLINE
GL-2050 THYRATRON

PIN	CONNECTION
1	NO CONNECTION
2	HEATER
3	ANODE
4	NO CONNECTION
5	CONTROL GRID
6	SHIELD GRID
7	HEATER
8	CATHODE

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Electronics Department
GENERAL ELECTRIC
Schenectady, N. Y.

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