

## THYRATRON

### DESCRIPTION

The GL-3C23 is a negative-control thyatron for use in regulated-rectifier circuits. The mixture of inert-gas and mercury vapor provides constancy

of characteristic within wide temperature limits. The construction, however, enables the tube to withstand higher voltages than many gas-filled types.

### TECHNICAL INFORMATION

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

#### GENERAL CHARACTERISTICS

Number of electrodes . . . . .	3
<b>Electrical</b>	
Cathode—Filamentary type	
Filament voltage . . . . .	2.5 volts
Filament current, approx. . . . .	7.0 amperes
Filament heating time, typical . . . . .	15 seconds
Peak voltage drop, typical . . . . .	16 volts
Approximate control characteristics	
Anode voltage . . . . .	25      100      500      volts
Grid voltage . . . . .	0      -2.5      -4.5      volts
Anode-to-grid capacitance, approx. . . . .	1.8 micromicrofarad
Ionization time, approx. . . . .	10 microseconds
Deionization time, approx. . . . .	1000 microseconds
<b>Mechanical</b>	
Net weight, approx. . . . .	3 ounces
Shipping weight, approx. . . . .	3 pounds
Mounting position . . . . .	vertical, base down

  
**Electronic**  
TUBE

**GENERAL**  **ELECTRIC**

## TECHNICAL INFORMATION (CONT'D)

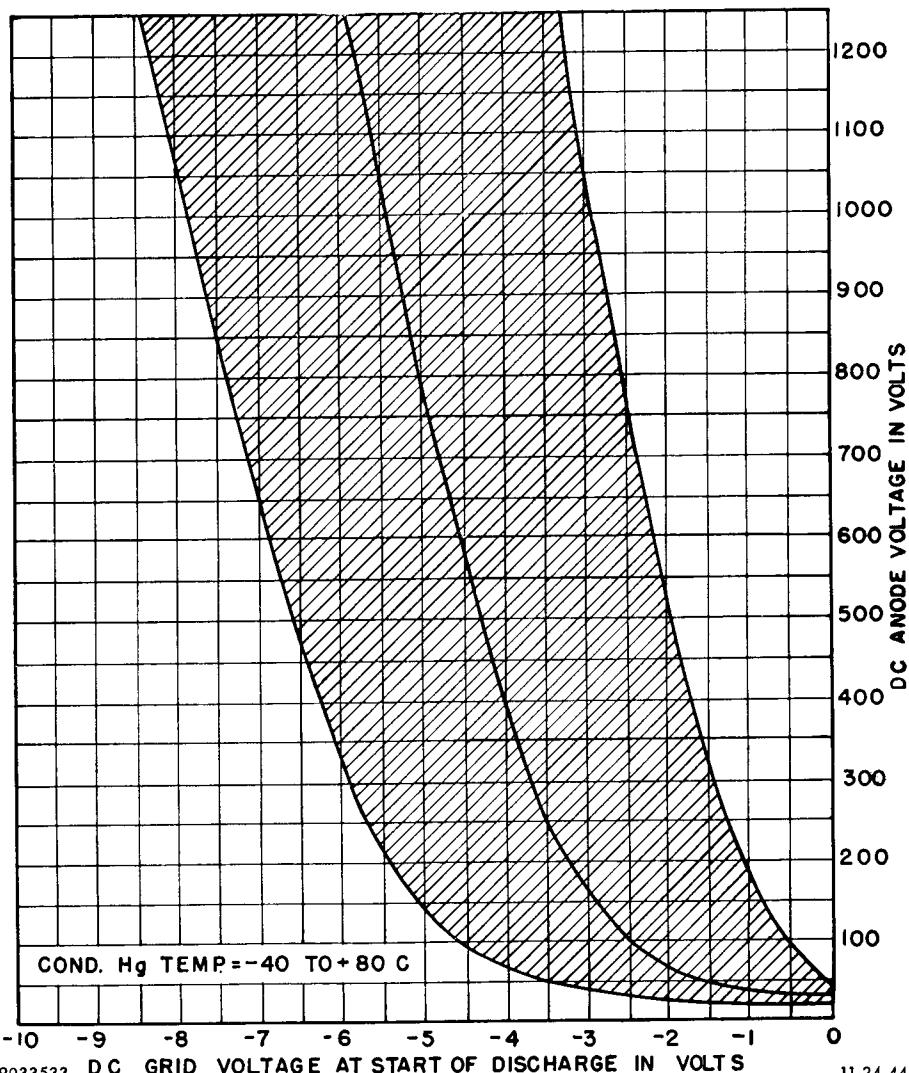
### MAXIMUM RATINGS

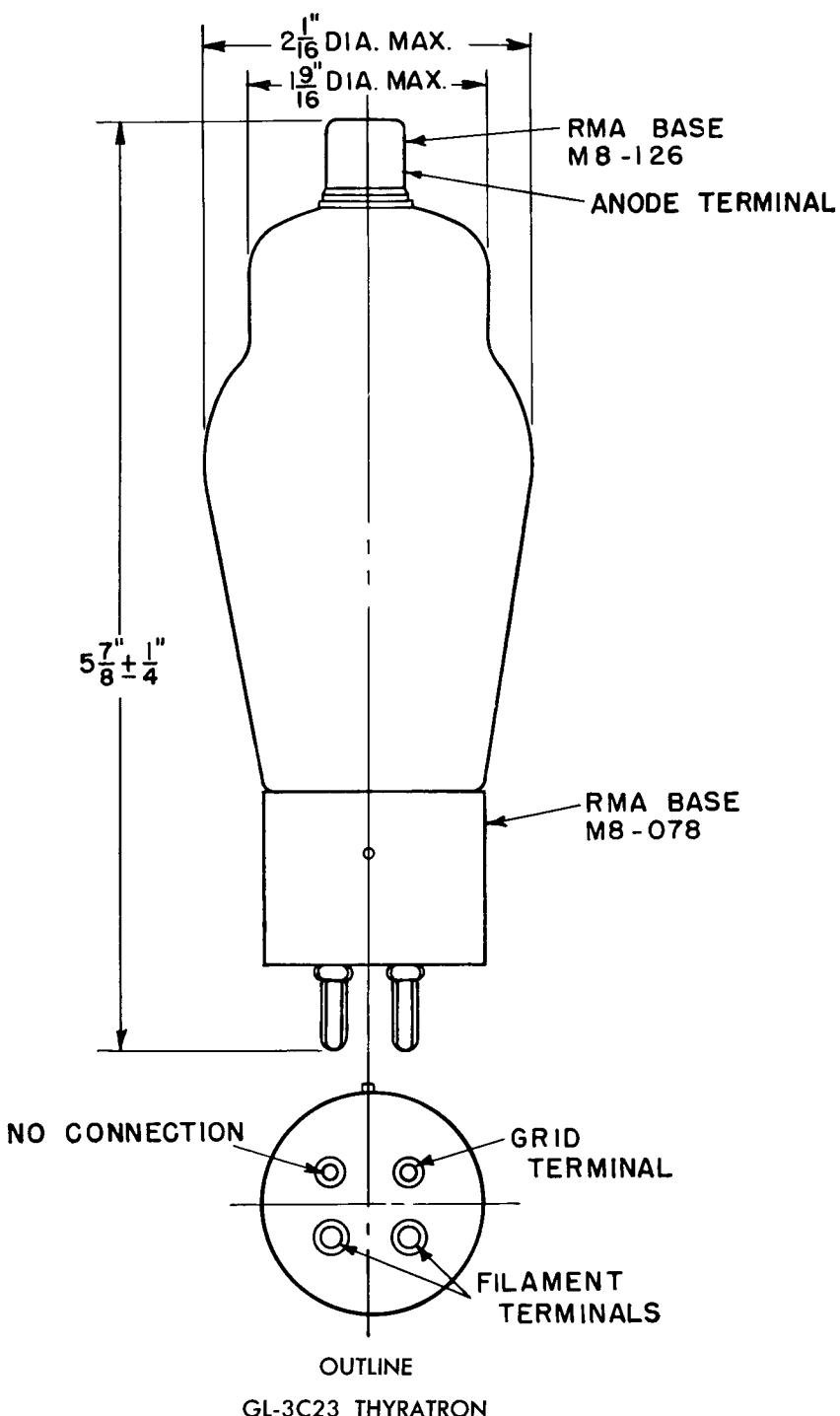
Maximum peak anode voltage	
Inverse.....	1250 volts
Forward.....	1250 volts
Maximum negative grid voltage	
Before conduction.....	500 volts
During conduction.....	10 volts
Maximum anode current	
Instantaneous, 25 cycles and above.....	.6.0 amperes
Instantaneous, below 25 cycles.....	.3.0 amperes
Average, 210 to 400 cycles.....	1.0 ampere
Average, below 210 cycles.....	1.5 ampere
Surge, for design only.....	120 amperes
Duration of surge current.....	.0.1 second
Maximum grid current	
Instantaneous.....	0.050 ampere
Average.....	0.010 ampere
Maximum time of averaging current.....	.5 seconds
Temperature limits, condensed mercury.....	-40 to +80 centigrade
Recommended temperature, condensed mercury.....	+40 centigrade

### THYRATRON GL-3C23

### TYPICAL CONTROL CHARACTERISTICS

SHADED AREA SHOWS RANGE OF CHARACTERISTIC





*Electronics Department*  
**GENERAL**  **ELECTRIC**  
*Schenectady, N. Y.*