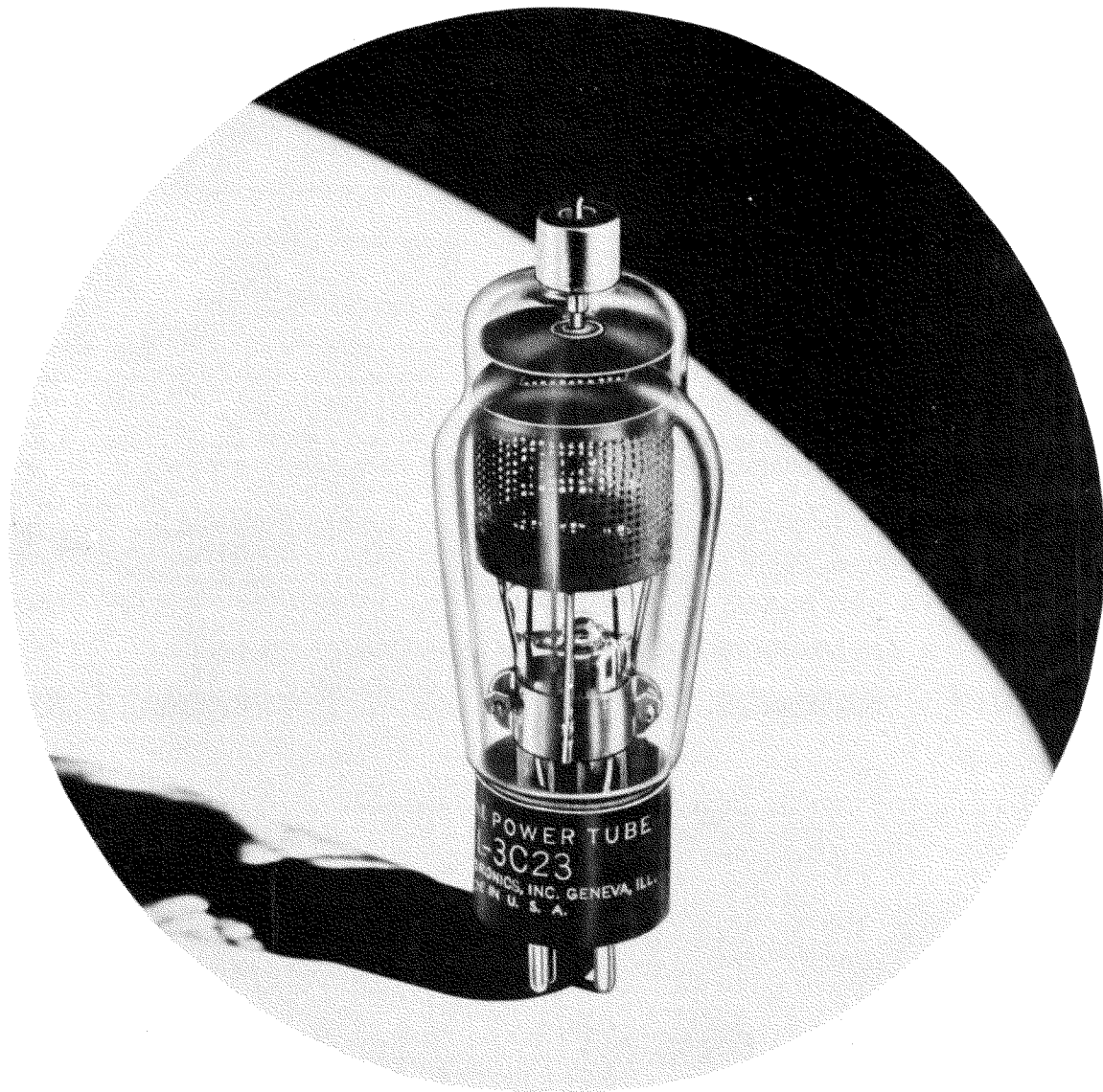


# THYRATRON TUBES

**NL-3C23, NL-323B and NL-393A**

**THYRATRON TUBES**

**1.5 Amperes dc — 6 Amperes Peak**



NATIONAL POWER TUBE NL-3C23 is a quick heating thyatron designed especially for industrial grid controlled rectifier applications. It is gas and mercury filled for quick starting and constancy of characteristics within wide temperature limits.

NL-323B and NL-393A are similar thyatron tubes, but use different bases and caps.

## NATIONAL ELECTRONICS, INC.

GENEVA, ILLINOIS, U. S. A.

# NL-3C23, NL-323B and NL-393A THYRATRON TUBES

## TECHNICAL INFORMATION

dc Amperes output (maximum) .....	1.5
Instantaneous Amperes output (maximum) .....	6
Maximum time of averaging anode current (seconds) .....	5
Maximum peak inverse volts .....	1250
Maximum peak forward volts .....	1250
Filament volts .....	2.5
Filament amperes .....	7
Filament heating time (seconds) .....	15
Typical arc drop at 5 amperes peak (volts) .....	15
Grid control characteristic .....	see curve
Maximum negative grid voltage before conduction (volts) .....	500
Maximum negative grid voltage during conduction (volts) .....	10
Ionization time (approx., microseconds) .....	10
Deionization time (approx., microseconds) .....	1000
Anode to grid capacitance (uuf) .....	2
Maximum ac short circuit current (amperes) .....	120
Condensed mercury temperature limits (°C)* .....	-40 to +80
Approximate temperature rise, cond. mercury above ambient (°C) .....	20
Mounting position .....	vertical, base down
Net weight (ounces) .....	3
Approx. shipping weight (lbs.) .....	3

\*The tube may be started and satisfactory operation will result between -40 and +80°C. For maximum life the condensed mercury temperature after warm-up should run between +40 and +80°C which corresponds to approximately +20 to +60°C ambient.

All data are for frequencies between 25 and 210 cycles per second.

Special ratings apply to other frequencies.

ALL DATA ARE BASED ON RETURNS TO FILAMENT CENTER TAP

### LIGHT FILAMENT BEFORE APPLYING LOAD

#### OUTLINE DRAWINGS

#### GRID CHARACTERISTIC

