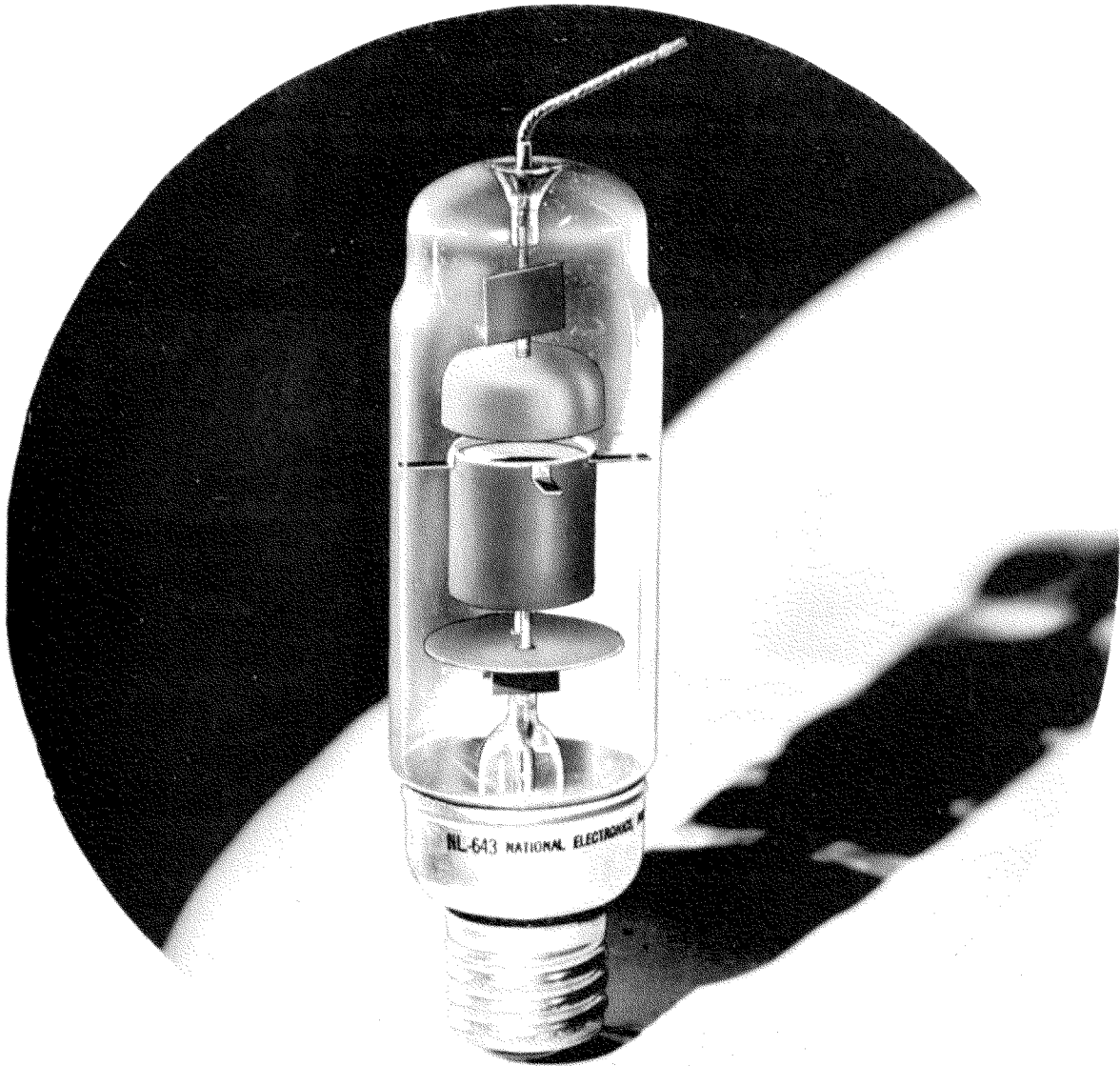


# RECTIFIER TUBE

**NL-643**

**RECTIFIER TUBE**

**15 Amperes dc**



NATIONAL POWER TUBE NL-643 is a sturdy rectifier tube designed especially for industrial power rectifier applications up to 200 volts dc. It is mercury filled for efficiency and the ability to withstand high inverse voltage. NL-643 is designed to give exceptionally long life when used within its ratings.

**NATIONAL ELECTRONICS, INC.**

GENEVA, ILLINOIS, U. S. A.

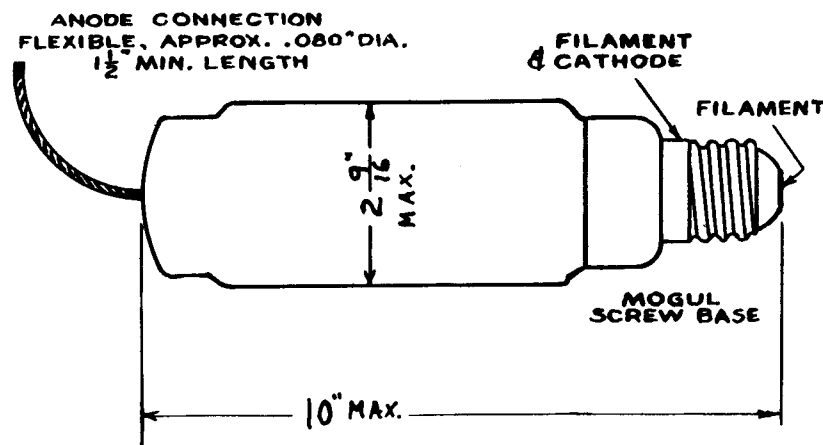
# NL-643 RECTIFIER TUBE TECHNICAL INFORMATION

dc Amperes output (maximum) .....	15
Instantaneous Amperes output (maximum) .....	90
Maximum time of averaging anode current (seconds) .....	15
Maximum peak inverse volts .....	700
Filament volts .....	2.5
Filament amperes .....	23 ± 2
Filament heating time (seconds) .....	120
Typical arc drop at 45 amperes peak (volts) .....	10
Typical Anode starting voltage (volts) .....	13
Maximum ac short circuit current (amperes) .....	750
Condensed mercury temperature limits (°C) (700 volts peak inverse) .....	+ 35 to + 90
Condensed mercury temperature limits (°C) (500 volts peak inverse) .....	+ 35 to + 100
Approximate temperature rise, cond. mercury above ambient, no load (°C) .....	35
Approximate temperature rise, cond. mercury above ambient, full load (°C) .....	50
Mounting position .....	vertical, base down
Net weight (ounces) .....	9
Approx. shipping weight (lbs.) .....	5

ALL DATA ARE BASED ON RETURNS TO FILAMENT TRANSFORMER CENTER TAP

## LIGHT FILAMENT BEFORE APPLYING LOAD

### OUTLINE DRAWING



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