

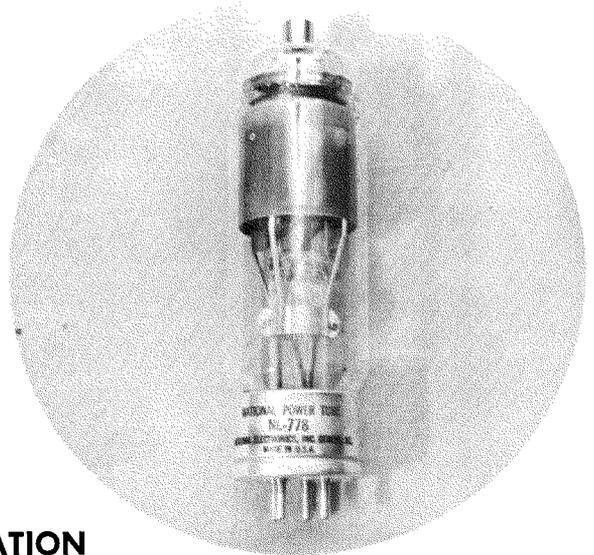
# NL-778 THYRATRON TUBE

**3.0 Amperes dc - 110 Amperes Peak**

**6.4 Amperes dc - 50 Amperes Peak**

**National Power Tube NL-778** is a quick heating industrial thyatron designed especially for welding control applications. It is gas and mercury filled for quick starting, constancy of characteristics within wide temperature limits, and long life.

It is available with bracket type base for panel mounting under type number NL-778P, and with the new National-designed lug type base under type Number NL-778L.



## TECHNICAL INFORMATION

### NL-778

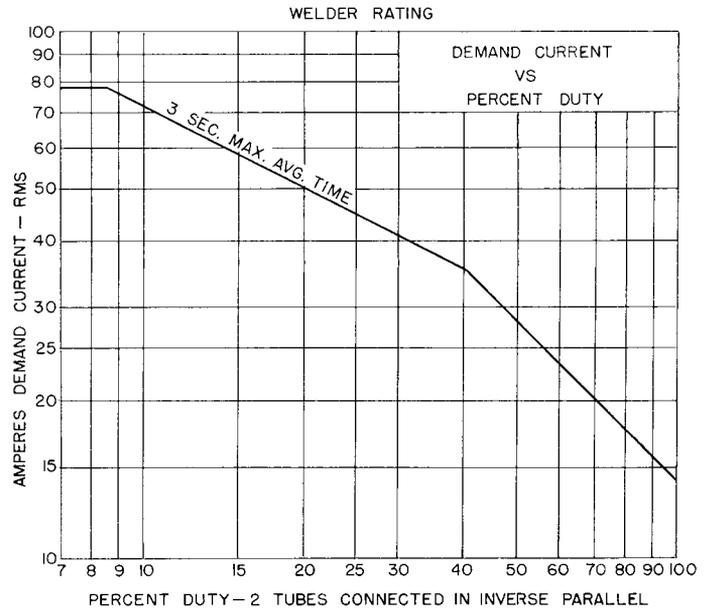
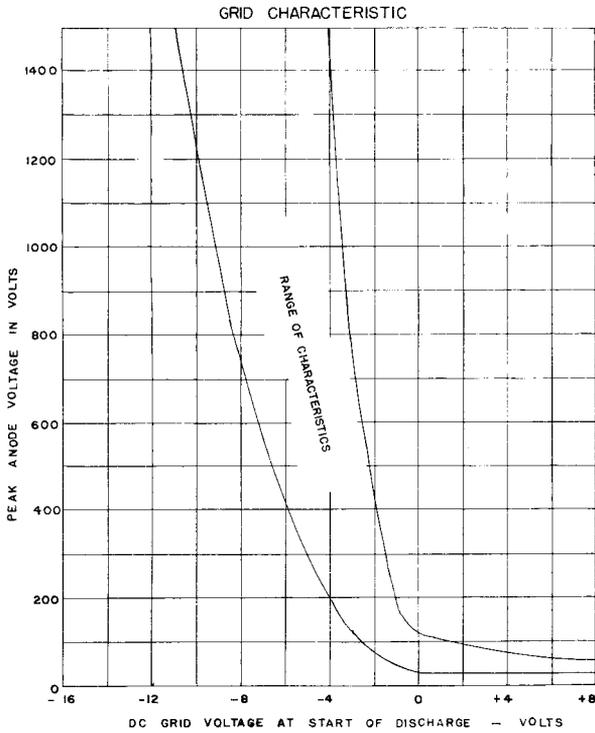
dc Amperes output (Maximum) .....	6.4	3.0
Instantaneous Amperes Output (Maximum) .....	50	110
Maximum time of averaging anode current (seconds) .....		3
Maximum peak inverse volts .....		1500
Maximum peak forward volts .....		1500
Condensed mercury temperature limits (°C) .....	-40 to +80*	
Filament volts .....		2.5
Filament amperes .....	21 ± 2	
Filament heating time (seconds) .....		60
Typical arc drop at 20 amperes peak (volts) .....		12
Grid control characteristic .....		See Curve
Maximum negative grid voltage before conduction (volts) .....		500
Maximum negative grid voltage during conduction (volts) .....		10
Maximum critical grid current (microamps) .....		10
Ionization time (approx., microseconds) .....		10
Deionization time (approx., microseconds) .....		1000
Anode to grid capacitance (uuf) .....		4
Maximum ac short circuit current (amperes) .....		770
Approx. temp. rise, cond. mercury above ambient (°C) .....		30
Mounting position .....	Vertical, base down	
Net weight (ounces) .....		9
Approximate shipping weight (lbs.) .....		5

\*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 +10 to +50°C ambient.

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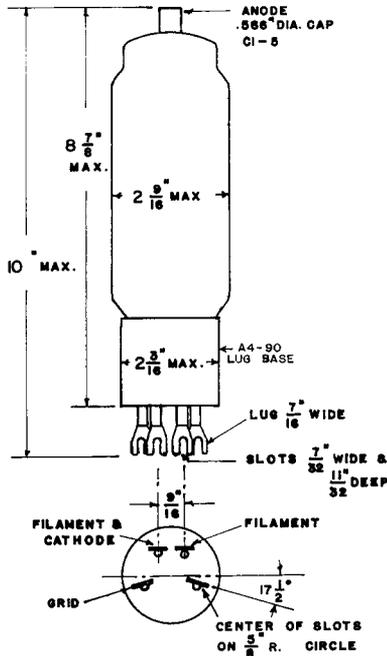
**NATIONAL ELECTRONICS, INC.**  
GENEVA, ILLINOIS, U. S. A.

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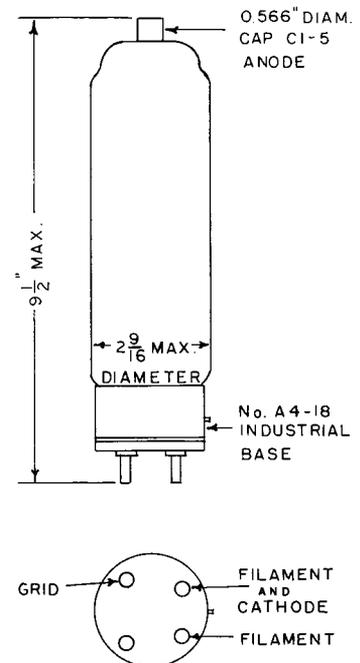


## OUTLINES

### NL-778L



### NL-778



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