



**NATIONAL**

**12AX7-A**

THE NL-12AX7A IS A MINIATURE HIGH- $\mu$  TWIN TRIODE ESPECIALLY SUITED FOR APPLICATIONS THAT REQUIRE LOW HUM AND MICROPHONIC OUTPUT. THE CENTER-TAPPED HEATER PERMITS THE TUBE TO BE OPERATED FROM EITHER A 6.3 VOLT OR A 12.6 VOLT HEATER SUPPLY.

ELECTRICAL

CATHODE . . . . .	COATED, UNIPOTENTIAL	
HEATER VOLTAGE, AC OR DC . . . . .	SERIES 12.6 $\pm$ 1.3	V
	PARALLEL 6.3 $\pm$ 0.6	V
HEATER CURRENT . . . . .	SERIES	0.15 A
	PARALLEL	0.3 A
CAPACITANCE, GRID TO PLATE, EACH SECTION . . . . .		1.7 pf
OUTPUT CAPACITANCE, EACH SECTION . . . . .		1.6 pf
OUTPUT CAPACITANCE, SECTION ONE . . . . .		0.46 pf
SECTION TWO . . . . .		0.34 pf

MECHANICAL

MOUNTING POSITION . . . . .	ANY
BASE . . . . .	SMALL BUTTON 9-PIN
DIMENSIONS . . . . .	SEE OUTLINE DRAWING
TERMINAL CONNECTIONS . . . . .	SEE BASING DIAGRAM

MAXIMUM RATINGS

PLATE VOLTAGE . . . . .	300	V
POSITIVE DC GRID VOLTAGE . . . . .	0	V
NEGATIVE DC GRID VOLTAGE . . . . .	55	V
PLATE DISSIPATION . . . . .	1.1	w
HEATER-CATHODE VOLTAGE		
HEATER POSITIVE WITH RESPECT TO CATHODE . . . . .	200	V
HEATER NEGATIVE WITH RESPECT TO CATHODE . . . . .	200	V

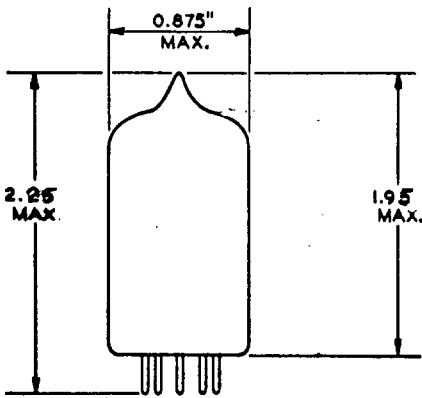
**NATIONAL ELECTRONICS**

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## AVERAGE CHARACTERISTICS AND TYPICAL OPERATION

PLATE VOLTAGE . . . . .	100	250	V
GRID VOLTAGE. . . . .	-1	-2	V
AMPLIFICATION FACTOR . . . . .	100	100	
TRANSCONDUCTANCE . . . . .	1250	1600	$\mu$ Mohos
PLATE CURRENT . . . . .	0.5	1.2	mA

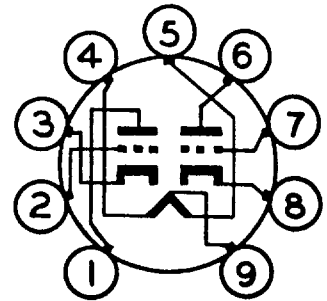
### PHYSICAL DIMENSIONS



### TERMINAL CONNECTIONS

- Pin 1 - Plate (Section 2)
- Pin 2 - Grid (Section 2)
- Pin 3 - Cathode (Section 2)
- Pin 4 - Heater
- Pin 5 - Heater
- Pin 6 - Plate (Section 1)
- Pin 7 - Grid (Section 1)
- Pin 8 - Cathode (Section 1)
- Pin 9 - Heater Center-Tap

### BASING DIAGRAM



### AVERAGE PLATE CHARACTERISTICS

