

**TYPE**  
**CK502AX***Excellence in Electronics*

The CK502AX is a filament type pentode of subminiature construction designed for use as a power amplifier in applications requiring economy of space, weight and battery drain. The flexible terminal leads may be soldered or welded directly to the terminals of circuit components without the use of sockets. Standard inline subminiature sockets may be used by cutting the leads to a suitable length.

**MECHANICAL DATA**ENVELOPE: T-2X3 GlassBASE: None (0.016" tinned flexible leads. Length: 1.5" min.  
Spacing: 0.048" center-to-center)TERMINAL CONNECTIONS: (Red Dot is adjacent to Lead 1)

|                             |                  |
|-----------------------------|------------------|
| Lead 1 Plate                | Lead 4 Grid #1   |
| Lead 2 Grid #2              | Lead 5 Filament, |
| Lead 3 Filament, negative ■ | positive ■       |

MOUNTING POSITION: Any**ELECTRICAL DATA**DIRECT INTERELECTRODE CAPACITANCES: ( $\mu\text{fds.}$ ) ▲

Grid to Plate: (g1 to p)

Input: g1 to (-f+g2)

Output: p to (-f+g2)

DESIGN CENTER MAXIMUM RATINGS:

Filament Voltage (dc) ●

Plate Voltage

Grid #2 Voltage

Total Cathode Current

CHARACTERISTICS AND TYPICAL OPERATION - CLASS A1 AMPLIFIER:

Filament Voltage (dc) ●

Filament Current

Plate Voltage

Grid #2 Voltage

Grid #1 Voltage

Plate Resistance (approx.)

Transconductance

Plate Current

Grid #2 Current

Load Resistance

Total Harmonic Distortion

Power Output

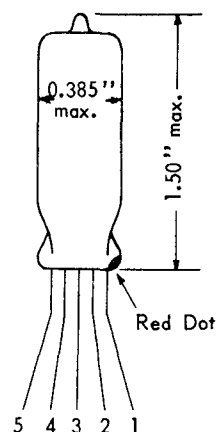
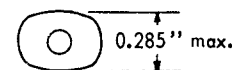
|      |                      |
|------|----------------------|
| 1.25 | volts                |
| 30   | ma.                  |
| 22.5 | 45 volts             |
| 22.5 | 45 volts             |
| 0 ♦  | -1.25 volts          |
| 0.22 | 0.25 meg.            |
| 385  | 500 $\mu\text{mhos}$ |
| 0.27 | 0.45 ma.             |
| 0.07 | 0.11 ma.             |
| 0.15 | 0.10 meg.            |
| 10   | 10 percent           |
| 1.2  | 6 mw                 |

▲ With shield connected to Lead 3.

■ Grid #3 is composed of two deflector plates, one being connected to Lead 3 and the other to Lead 5.

● Do not use in series filament circuits. Filament voltage must never exceed 1.55 volts.

♦ Grid resistor=5 megohms.

0.2 max.  
2.7  
5.71.25 ± 20% volts  
45 volts  
45 volts  
1.0 ma.