



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 Glass

BASE: 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, positive ■
Lead 3 Filament, negative ■	

MOUNTING POSITION: Any

ELECTRICAL DATA

DIRECT INTERELECTRODE CAPACITANCES: ($\mu\text{fids.}$)▲

Grid to Plate: (g1 to p)	0.2 max.
Input: g1 to (-f+g2)	2.7
Output: p to (-f+g2)	5.7

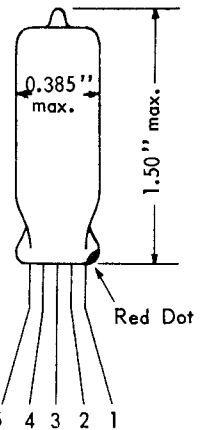
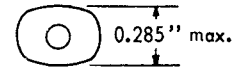
DESIGN CENTER MAXIMUM RATINGS:

Filament Voltage (dc) ●	1.25 ± 20% volts
Plate Voltage	45 volts
Grid #2 Voltage	45 volts
Total Cathode Current	1.0 ma.

CHARACTERISTICS AND TYPICAL OPERATION - CLASS A1 AMPLIFIER:

Filament Voltage (dc) ●	1.25	1.25 volts
Filament Current	30	30 ma.
Plate Voltage	22.5	45 volts
Grid #2 Voltage	22.5	45 volts
Grid #1 Voltage	0 ♦	-1.25 volts
Plate Resistance (approx.)	0.22	0.25 meg.
Transconductance	385	500 μmhos
Plate Current	0.27	0.45 ma.
Grid #2 Current	0.07	0.11 ma.
Load Resistance	0.15	0.10 meg.
Total Harmonic Distortion	10	10 percent
Power Output	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.



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2.7
5.7

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