The IAD4 is a filament type, fully-shielded sharp cutoff pentode of subminiature construction designed for RF and AF applications in portable equipment. 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-2 x 3 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 2 Grid #2
Lead 3 Negative Filament, Grid #3 Shield ▲
Lead 4 Grid #1
Lead 5 Positive Filament, Grid #3▲
MOUNTING POSITION: Any

ELECTRICAL DATA

DIRECT INTERELECTRODE CAPACITANCES: (μμfd.s.)
Grid #1 to Plate 0.01 max.
Input 4.0
Output 4.0

RATINGS - ABSOLUTE MAXIMUM VALUES:

- Filament Voltage (dc) 1.25 ± 20% volts
- Plate Voltage 100 volts
- Grid #2 Voltage 100 volts
- Plate Dissipation 0.3 watt
- Grid #2 Dissipation 0.1 watt
- Total Cathode Current 5.5 ma.

CHARACTERISTICS AND TYPICAL OPERATION - CLASS A1 AMPLIFIER:

- Filament Voltage (dc) 1.25 volts
- Filament Current 0.10 amps.
- Plate Voltage 45 volts
- Grid #2 Voltage 45 volts
- Grid #1 Voltage 0 volts
- Plate Resistance (approx.) 0.5 meg.
- Transconductance 2000 μmhos
- Plate Current 3.0 ma.
- Grid #2 Current 0.9 ma.
- Grid #1 Voltage (approx.) for Gm = 10 μmhos -3.5 volts

♦ Bulb is entirely coated with a metallic 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.
■ MIL-E-18 paragraphs 3.5.1.1 and 3.5.1.2, permitting maximum plate and screen voltage ratings to be exceeded, shall not apply.
● Grid #1 resistor = 2 megohms.
AVERAGE PLATE CHARACTERISTICS

Triode Connected

Condition:
$E_F = 1.25 \text{ Vdc}$

Plate Current - Milliamperes

Plate Voltage - Volts
AVERAGE CHARACTERISTICS

Conditions:
Ef = 1.25 Vdc
Eb = Ec2 = 45 V