The CK6419 is a filament type pentode of subminiature construction designed for use as a voltage amplifier in portable and wearable equipment. It is similar in characteristics to type CK549DX. 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-1½ X 2 Glass
BASE: None (0.016” tinned flexible leads. Length: 1.5” min.
Spacing: 0.040” center-to-center)
TERMINAL CONNECTIONS: (Red Dot is adjacent to Lead 1)
Lead 1 Plate
Lead 2 Grid #2
Lead 3 Filament, Negative Grid #3
Lead 4 Grid #1
Lead 5 Filament, Positive Grid #3
MOUNTING POSITION: Any

ELECTRICAL DATA

RATINGS - ABSOLUTE MAXIMUM VALUES:
Filament Voltage (dc) 0.625 ± 20% volts
Plate Voltage 25 volts
Grid #2 Voltage 25 volts
Cathode Current 0.1 ma.

CHARACTERISTICS AND TYPICAL OPERATION:
Filament Voltage (dc) 0.625 volts
Filament Current 10 ma.
Plate Voltage 15 volts
Grid #2 Voltage 15 volts
Grid #1 Voltage -0.625 volts
Plate Current 55 μa.
Grid #2 Current 20 μa.
Transconductance 100 μmhos
Plate Resistance (approx.) 2 meg.

CHARACTERISTICS AND TYPICAL OPERATION - RESISTANCE COUPLED CLASS A1 AMPLIFIER:
Filament Voltage (dc) 0.625 volts
Filament Current 10 ma.
Plate and Grid #2 Supply Voltage 15 volts
Grid #1 Voltage -0.625 volts
Load Resistance 2.2 meg.
Grid #2 Resistor 3.3 meg.
Grid #1 Resistor 10 meg.
Plate Current 4.6 μa.
Grid #2 Current 0.20 μa.
Transconductance 17 μmhos
Plate Resistance (approx.) 12 meg.
Average Voltage Gain ▲ 27

▲ Measured with a signal of 0.05 volts (RMS) and a coupled load impedance of 10 megohms.
◆ Grid #3 is composed of two deflector plates, one being connected to lead 3 and the other to lead 5.

Tentative Data
AVERAGE PLATE CHARACTERISTICS

Conditions:
- $E_f = 0.625$ Vdc
- $E_{c2} = 13$ Vdc
- $I_b =$
- $I_{e2} =$

Plate or Grid #2 Current - Microamperes

Plate Voltage - Volts
AVERAGE PLATE CHARACTERISTICS
(Triode Connected)

Condition:
Ef = 0.625 V