

*Excellence in Electronics*

The CK5970 is a filament type double pentode of subminiature construction with remote cut-off characteristics designed for use as a Class A RF amplifier at frequencies in the VHF range. The flexible terminal leads may be soldered or welded to the terminals of circuit components without the use of sockets. Standard 8-Pin subminiature sockets may be used by cutting the leads to a suitable length.

**MECHANICAL DATA**ENVELOPE: T-3 GlassBASE: Subminiature Button 8-Pin (0.017" tinned flexible leads.  
Length: 1.50" minimum)TERMINAL CONNECTIONS:

Lead 1 Filament Negative ●  
Lead 2 Grid #1, Unit 2  
Lead 3 Grid #2, Unit 2  
Lead 4 Plate, Unit 2

Lead 5 Plate, Unit 1  
Lead 6 Grid #2, Unit 1  
Lead 7 Grid #1, Unit 1  
Lead 8 Filament Positive ●

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

Grid to Plate (each unit)  
Input (each unit)  
Output (each unit)  
Grid #1 to Grid #1  
Plate to Plate

0.1 max.  
3.3  
2.4  
0.02  
0.3

RATINGS - ABSOLUTE MAXIMUM VALUES:

Filament Voltage (dc)  
Plate Voltage  
Grid #2 Voltage  
Total Cathode Current (each unit)

1.25 $\pm$ 20% volts  
45 volts  
45 volts  
5 ma.

CHARACTERISTICS AND TYPICAL OPERATION - CLASS A1 AMPLIFIER:

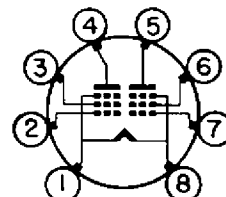
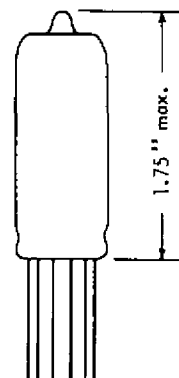
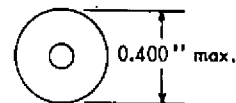
Filament Voltage (dc)  
Filament Current  
Plate Voltage  
Grid #2 Voltage  
Grid #1 Voltage ♦  
Plate Resistance (each unit)  
Transconductance (each unit)  
Plate Current (each unit)  
Grid #2 Current (each unit)  
Grid #1 Voltage (approx.)  
for Plate Current of 20  $\mu\text{A.}$  (each unit)

1.25 volts  
160 ma.  
45 volts  
45 volts  
0 volts  
0.17 meg.  
1850  $\mu\text{mhos}$   
3.0 ma.  
0.9

-11.5 volts

● Grid #3 is composed of two separate deflector plates, one of which is connected to Lead 1, and the other to Lead 8.

♦ Grid resistor = 5 megohms.

**TYPE**  
**CK5970**

BOTTOM VIEW

8DS

from JETEC release #1961, July 1, 1957

Tentative Data

RAYTHEON MANUFACTURING COMPANY  
RECEIVING AND CATHODE RAY TUBE OPERATIONS