## DESCRIPTION AND RATING

### 4CB6

**4CB6 Pentode.** Except for heater ratings and heater-cathode ratings, the 4CB6 is identical to the 6CB6-A.

### GENERAL

**ELECTRICAL**

Heater Characteristics and Ratings
Heater Voltage, AC or DC† .............................................. 4.2 Volts
Heater Current† .......................................................... 0.45 ± 0.03 Amperes
Heater Warm-up Time‡ .................................................... 11 Seconds

**MAXIMUM RATINGS**

**DESIGN-MAXIMUM VALUES**

Heater-Cathode Voltage
Heater Positive with Respect to Cathode
  DC Component .......................................................... 100 Volts
  Total DC and Peak .................................................... 200 Volts
Heater Negative with Respect to Cathode
  DC Component .......................................................... 200 Volts
  Total DC and Peak .................................................... 300 Volts

Design-Maximum ratings are limiting values of operating and environmental conditions applicable to a bogey electron tube of a specified type as defined by its published data and should not be exceeded under the worst probable conditions. The tube manufacturer chooses these values to provide acceptable serviceability of the tube, making allowance for the effects of changes in operating conditions due to variations in the characteristics of the tube under consideration.

The equipment manufacturer should design so that initially and throughout life no design-maximum value for the intended service is exceeded with a bogey tube under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, signal variation, environmental conditions, and variations in the characteristics of all other electron devices in the equipment.

### 4CS6

**4CS6 Heptode.** Except for heater characteristics and ratings, the 4CS6 is identical to the 6CS6.

### GENERAL

**ELECTRICAL**

Heater Characteristics and Ratings
Heater Voltage, AC or DC .................................................. 4.2 Volts
Heater Current ............................................................ 0.45 Amperes
Heater Warm-up Time‡ ..................................................... 11 Seconds

The tubes and arrangements disclosed herein may be covered by patents of General Electric Company or others. Neither the disclosure of any information herein nor the sale of tubes by General Electric Company conveys any license under patent claims covering combinations of tubes with other devices or elements. In the absence of an express written agreement to the contrary, General Electric Company assumes no liability for patent infringement arising out of any use of the tubes with other devices or elements by any purchaser of tubes or others.

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*Supersedes ET-T1356C dated 1-59*
4CY5 Tetrode. Except for heater characteristics and ratings, the 4CY5 is identical to the 2CY5, 3CY5 and 6CY5.

GENERAL

ELECTRICAL
Heater Characteristics and Ratings
Heater Voltage, AC or DCφ ......................................................... 4.5 Volts
Heater Current† ........................................................................... 0.3 ±0.02 Amperes
Heater Warm-up Time‡ ................................................................. 11 Seconds

4DT6 Pentode. Except for heater characteristics and ratings, the 4DT6 is identical to the 6DT6.

GENERAL

ELECTRICAL
Heater Characteristics and Ratings
Heater Voltage, AC or DC¶ ............................................................ 4.2 Volts
Heater Current† ........................................................................... 0.45 ±0.03 Amperes
Heater Warm-up Time‡ ................................................................. 11 Seconds

4EW6 Pentode. Except for heater characteristics and ratings, the 4EW6 is identical to the 6EW6.

GENERAL

ELECTRICAL
Heater Characteristics and Ratings
Heater Voltage, AC or DC* ............................................................ 4.2 Volts
Heater Current† ........................................................................... 0.6 ±0.04 Amperes
Heater Warm-up Time‡ ................................................................. 11 Seconds

FOOTNOTES
φ Heater voltage for a bogey tube at If = 0.3 amperes.
¶ Heater voltage for a bogey tube at If = 0.45 amperes.
* Heater voltage for a bogey tube at If = 0.6 amperes.
† For series heater operation, the equipment designer should design the equipment so that heater current is centered at the specified bogey value, with heater supply variations restricted to maintain heater current within the specified tolerance.
‡ The time required for the voltage across the heater to reach 80 percent of its rated value after applying 4 times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to 3 times the rated heater voltage divided by the rated heater current.

RECEIVING TUBE DEPARTMENT

GENERAL ELECTRIC

OWENSBORO, KENTUCKY