**TUBES**

17AX3 through 17BZ3

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**17AX3 Compactron Diode.** The 17AX3 is a compactron, single heater-cathode type diode, intended for service as the damping diode in the horizontal-deflection circuit of television receivers.

Except for heater characteristics and ratings, the 17AX3 is identical to the 6AX3 and 12AX3.

**GENERAL**

**ELECTRICAL**

Cathode - Coated Unipotential

Heater Characteristics and Ratings

Heater Voltage, AC or DC* ................................................................. 16.8 Volts

Heater Current ................................................................. 0.45 ± 0.03 Amperes

Heater Warm-up Time, Average ....................................................... 11 Seconds

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**17BE3 Compactron Diode.** The 17BE3 is a compactron, single heater-cathode type diode, intended for service as the damping diode in the horizontal-deflection circuit of television receivers.

Except for heater characteristics and ratings, the 17BE3 is identical to the 6BE3 and 12BE3.

**GENERAL**

**ELECTRICAL**

Cathode - Coated Unipotential

Heater Characteristics and Ratings

Heater Voltage, AC or DC* ................................................................. 16.8 Volts

Heater Current ................................................................. 0.45 ± 0.03 Amperes

Heater Warm-up Time, Average ....................................................... 11 Seconds

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**17BF11 Compactron Dissimilar Double Pentode.** The 17BF11 is a compactron containing a sharp-cutoff dual-control pentode and a power pentode. The dual-control pentode is intended for use as an FM detector and the power pentode as an audio-frequency output amplifier in television receivers.

Except for heater characteristics and ratings, the 17BF11 is identical to the 6BF11.

**GENERAL**

**ELECTRICAL**

Cathode - Coated Unipotential

Heater Characteristics and Ratings

Heater Voltage, AC or DC* ................................................................. 16.8 Volts

Heater Current ................................................................. 0.45 ± 0.03 Amperes

Heater Warm-up Time, Average ....................................................... 11 Seconds

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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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**GENERAL ELECTRIC**

Supersedes 17AX3 thru 17BZ3 PI Sheet dated 1-67 and 17BW3 PI Sheet dated 11-67
178F11-A Compactron Dissimilar Double Pentode. The 178F11-A is a compactron containing a sharp-cutoff dual-control pentode and a power pentode. The dual-control pentode is intended for use as an FM detector and the power pentode as an audio-frequency output amplifier in television receivers.

The 178F11-A is unilaterally interchangeable with the 178F11 and differs only in utilizing a shorter envelope.

**MECHANICAL**

Outline Drawing
- Maximum Diameter .................................................. 1.188 Inches
- Minimum Diameter .................................................. 1.062 Inches
- Maximum Over-all Length ........................................... 2.250 Inches
- Maximum Seated Height ............................................. 1.875 Inches
- Minimum Seated Height ............................................. 1.625 Inches

178W3 Compactron Diode. The 178W3 is a compactron, single heater-cathode type diode intended for service as the damping diode in the horizontal-deflection circuit of television receivers.

Except for heater characteristics and ratings, the 178W3 is identical to the 228W3.

**ELECTRICAL**

Cathode - Coated Unipotential

Heater Characteristics and Ratings
- Heater Voltage, AC or DC* ........................................... 16.8 Volts
- Heater Current# .................................................... 0.6 ± 0.04 Amperes
- Heater Warm-up Time, Average# .................................. 11 Seconds

178Z3 Compactron Diode. The 178Z3 is a compactron, single heater-cathode type diode intended for service as the damping diode in the horizontal-deflection circuit of television receivers.

Except for heater characteristics and ratings, the 178Z3 is identical to the 6823.

**ELECTRICAL**

Cathode - Coated Unipotential

Heater Characteristics and Ratings
- Heater Voltage, AC or DC* ........................................... 16.8 Volts
- Heater Current# .................................................... 0.45 ± 0.03 Amperes
- Heater Warm-up Time, Average# .................................. 11 Seconds

**NOTES**

* Heater voltage for a bogey tube at If = 0.45 amperes.
* Heater voltage for a bogey tube at If = 0.6 amperes.
* 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 the bogey value after applying 4 times the bogey heater voltage to a circuit consisting of the tube heater in series with a resistance equal to 3 times the bogey heater voltage divided by the bogey heater current.

**TUBE PRODUCTS DEPARTMENT**

**GENERAL ELECTRIC**

Owensboro, Kentucky 42301