



**ELECTRONIC  
INNOVATIONS  
IN ACTION**

**TUBES**

**— PRODUCT INFORMATION —**

**12AX3 THROUGH 12BF11**

<b>12AX3</b>
<b>12BE3</b>
<b>12BF11</b>

**12AX3 Compactron Diode.** The 12AX3 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, the 12AX3 is identical to the 6AX3.

**GENERAL**

**ELECTRICAL**

Cathode - Coated Unipotential

Heater Characteristics and Ratings

Heater Voltage, AC or DC*	12.6	Volts
Heater Current•	0.6±0.04	Amperes
Heater Warm-up Time, Average♦	11	Seconds

**12BE3 Compactron Diode.** The 12BE3 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, the 12BE3 is identical to the 6BE3.

**GENERAL**

**ELECTRICAL**

Cathode - Coated Unipotential

Heater Characteristics and Ratings

Heater Voltage, AC or DC*	12.6	Volts
Heater Current•	0.6±0.04	Amperes
Heater Warm-up Time, Average♦	11	Seconds

**12BF11 Compactron Dissimilar Double Pentode.** The 12BF11 is a compactron containing a sharp-cutoff, dual-control pentode (Section 2) and a power pentode (Section 1). 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 12BF11 is identical to the 6BF11.

**GENERAL**

**ELECTRICAL**

Cathode - Coated Unipotential

Heater Characteristics and Ratings

Heater Voltage, AC or DC*	12.6	Volts
Heater Current•	0.6±0.04	Amperes
Heater Warm-up Time, average♦	11	Seconds



## NOTES

- ★ Heater voltage for a bogey tube at  $I_f = 0.6$  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.

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