DESCRIPTION AND RATING

3AF4-A

3AF4-A Triode. Except for heater characteristics and ratings, the 3AF4-A is identical to the 6AF4-A.

GENERAL

ELECTRICAL

Cathode—Coated Unipotential
Heater Characteristics and Ratings

Heater Voltage, AC or DC¶	3.2	Volts
Heater Current†	0.45 ± 0.03	Amperes
Heater Warm-up Time‡	11	Seconds

3AF4-B

3AF4-B Triode. Except for heater ratings and heater-cathode voltage ratings, the 3AF4-B is identical to the 6AF4-A. The 3AF4-B differs from the 3AF4-A in heater-cathode voltage ratings only.

GENERAL

ELECTRICAL

Cathode—Coated Unipotential
Heater Characteristics and Ratings

Heater Voltage, AC or DC¶	3.2	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	180	Volts
Heater Negative with Respect to Cathode		
Total DC and Peak	180	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.

3AL5

3AL5 Double Diode. Except for heater ratings and heater-cathode voltage ratings, the 3AL5 is identical to the 6AL5.

GENERAL

ELECTRICAL

Cathode—Coated Unipotential
Heater Characteristics and Ratings

Heater Voltage, AC or DC	3.15	Volts
Heater Current	0.6	Amperes
Heater Warm-up Time‡	11	Seconds

Supersedes ET-T1264A dated 12-56, ET-T881 dated 8-54, ET-T915 dated 3-55 and ET-T922 dated 3-55

MAXIMUM RATINGS

DESIGN-CENTER 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		
Total DC and Peak	200	Volts

Design-Center ratings are limiting values of operating conditions applicable to a bogey tube of a specified type as defined by its published data, and should not be exceeded under normal conditions.

The tube manufacturer chooses these values to provide acceptable serviceability of the tube in average applications, making allowance for normal changes in operating conditions due to rated supply voltage variation (For an AC power source, 117 volts plus or minus 10% is accepted USA practice.), equipment component variation, equipment control adjustment, load variation, signal variation, environmental conditions, and variations in tube characteristics.

The equipment manufacturer should design so that initially no design-center value for the intended service is exceeded with a bogey tube in equipment operating at the stated normal supply voltage.

3AU6

3AU6 Pentode. Except for heater characteristics and ratings, the 3AU6 is identical to the 6AU6 and 6AU6-A.

GENERAL

ELECTRICAL

Cathode—Coated Unipotential

Heater Characteristics and Ratings

Heater Voltage, AC or DC*	3.15	Volts
Heater Current†	0.6 ± 0.04	Amperes
Heater Warm-up Time‡	11	Seconds

3AV6

3AV6 Duplex-Diode Triode. Except for heater characteristics and ratings, the 3AV6 is identical to the 6AV6.

GENERAL

ELECTRICAL

Cathode—Coated Unipotential

Heater Characteristics and Ratings

Heater Voltage, AC or DC*	3.15	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