
DESCRIPTION AND RATING

12C5

12C5 Beam Pentode. Except for heater characteristics and ratings, the 12C5 is identical to the 50C5.

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‡	11	Seconds

12CA5

12CA5 Beam Pentode. Except for heater ratings and heater-cathode voltage ratings, the 12CA5 is identical to the 6CA5.

GENERAL**ELECTRICAL**

Cathode—Coated Unipotential

Heater Characteristics and Ratings

Heater Voltage, AC or DC	12.6	Volts
Heater Current	0.6	Amperes
Heater Warm-up Time‡	11	Seconds

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

DC Component	200	Volts
Total DC and Peak	300	Volts

Design-Center 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 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, equipment

component variation, equipment control adjustment, load variation, signal variation, environmental conditions, and variations in the characteristics of the tube under consideration and of all other electron devices in the equipment.

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

NOTES

φ Heater voltage for a bogey tube at $I_f = 0.3$ amperes.

¶ Heater voltage for a bogey tube at $I_f = 0.45$ amperes.

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

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