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HALF-WAVE GAS RECTIFIER

GENERAL DATA

Electrical:

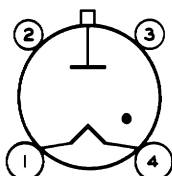
Filament, Coated:

Voltage	2.5 $\pm$ 5%		ac volts
Current at 2.5 volts.	5		amp
Minimum heating time at rated voltage.	15		sec

Mechanical:

Operating Position.		Any
Maximum Overall Length.		6-5/16"
Seated Length		5-1/4" $\pm$ 7/16"
Maximum Diameter.		2-1/16"
Weight (Approx.).		3 oz
Bulb.		T16
Cap		Medium (JETEC No. C1-5)
Base.		Medium-Shell Small 4-Pin with Bayonet (JETEC No. A4-10)
Basing Designation for BOTTOM VIEW.		4P

Pin 1—Filament
Pin 2—No Connection
Pin 3—No Connection



Pin 4—Filament,
Cathode
Shield
Cap—Anode

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Maximum Ratings, Absolute Values:

For anode-supply frequencies up to 500 cps

PEAK INVERSE ANODE VOLTAGE.	4500 max.	volts
ANODE CURRENT:		
Peak.	2 max.	amp
Average*.	0.5 max.	amp
Fault, for duration of		
0.1 second maximum.	20 max.	amp
AMBIENT-TEMPERATURE RANGE	-75 to +90	$^{\circ}$ C

CHARACTERISTICS RANGE VALUES* FOR EQUIPMENT DESIGN

	Note	Min.	Max.	
Filament Current.	1	4.6	5.4	amp
Critical Anode Voltage.	2	—	110	volts
Peak Tube Voltage Drop.	3	—	14	volts

Note 1: With 2.5 volts rms on filament.

Note 2: With 2.38 volts rms on filament.

Note 3: With 2.5 volts rms on filament, peak anode current of 2 amperes provided by half-cycle pulse from a 60-cps sine wave and recurring approximately once a second. Tube drop is measured by an oscilloscope connected between anode and center-tap of filament transformer.

* #
: See next page.

← Indicates a change.

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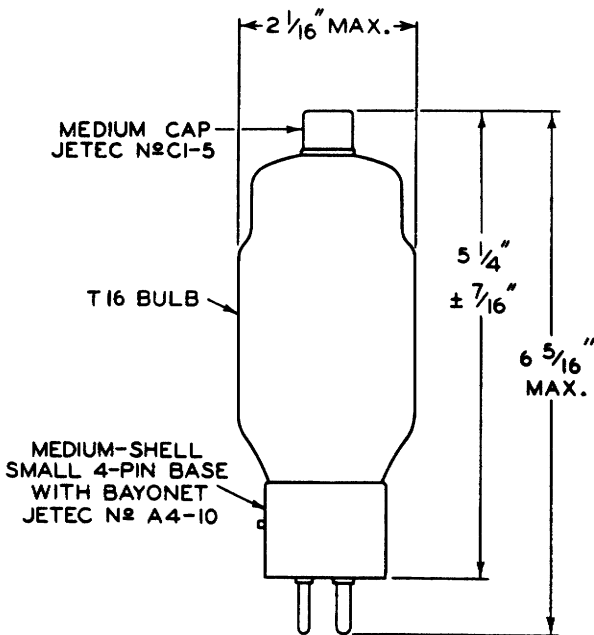
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* Averaged over any period of 30 seconds maximum.

* Throughout tube life.

OPERATING CONSIDERATIONS

If the *anode return* of each tube is not connected to the center-tap of the filament-supply winding, the return should be made to that side of the filament to which the cathode shield is connected.



92CM-6555R3



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For Circuit Figures, see Front of this Section

CIRCUIT	MAX. TRANS. SEC. VOLTS (RMS) E	APPROX. DC OUTPUT VOLTS TO FILTER E _{av}	MAX. DC OUTPUT AMPERES I _{av}	MAX. DC OUTPUT KW TO FILTER P _{dc}
Fig. 1 Half-Wave Single-Phase In-Phase Operation	3100	1400	0.5	0.7
Fig. 2 Full-Wave Single-Phase In-Phase Operation	1500	1400	1.0	1.4
Fig. 3 Series Single-Phase In-Phase Operation	3100	2900	1.0	2.9
Fig. 4 Half-Wave Three-Phase In-Phase Operation	1800	2200	1.5	3.3
Fig. 5 Parallel Three-Phase Quadrature Operation	1800	2200	3.0	6.6
Fig. 6 Series Three-Phase Quadrature Operation	1800	4300	1.5	6.4
Fig. 7 Half-Wave Four-Phase Quadrature Operation	1500	2000	Resis- tive Load 1.8	Induc- tive Load 2.0
Fig. 8 Half-Wave Six-Phase Quadrature Operation	1500	2200	Resis- tive Load 1.9	Induc- tive Load 2.0
			Resis- tive Load 4	Induc- tive Load 4.4