

RCA Transmitting Tubes

<i>Circuit</i> (For circuit figures, refer to <i>Rectifier Considerations</i> Section)	<i>Fig.</i>	<i>Max. Trans.</i> <i>Sec. Volts</i> (RMS) <i>E</i>	<i>Approx. DC</i> <i>Output Volts</i> <i>To Filter</i> <i>E_{av}</i>	<i>Max. DC</i> <i>Output</i> <i>Amperes</i> <i>I_{av}</i>	<i>Max. DC</i> <i>Output KW</i> <i>To Filter</i> <i>P_{dc}</i>
Series Three-Phase.....	59	4000* 2000^ 1000□	9600 4800 2400	0.75 0.75 1.5	7.2 3.6 3.6
Half-Wave Four-Phase....	60	3500* 1700^ 800□	4500 2300 1100	0.91* 1.0■ 0.91* 1.0■ 1.82* 2.0■	4.05* 4.5■ 2.07* 2.3■ 1.98* 2.2■
Half-Wave Six-Phase.....	61	3500* 1700^ 800□	4800 2400 1200	0.95* 1.0■ 0.95* 1.0■ 1.90* 2.0■	4.60* 4.8■ 2.30* 2.4■ 2.28* 2.4■

* For maximum peak inverse anode voltage of 10000 volts and maximum average anode current of 0.25 ampere.

^ For maximum peak inverse anode voltage of 5000 volts and maximum average anode current of 0.25 ampere.

□ For maximum peak inverse anode voltage of 2500 volts and maximum average anode current of 0.5 ampere.

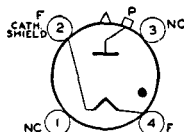
* Resistive load.

■ Inductive load.

HALF-WAVE MERCURY- VAPOR RECTIFIER

872-A

Coated-filament type used in power supply of transmitting and industrial equipment. Maximum peak inverse anode volts, 10,000; maximum average anode amperes, 1.25. Requires



Jumbo four-contact socket and may be mounted in vertical position only, base down. OUTLINE 52, *Outlines* Section.

FILAMENT VOLTAGE (AC)°	5.0	volts
FILAMENT CURRENT	7.5	amperes
PEAK TUBE VOLTAGE DROP (Approx.)	10	volts

° Filament voltage must be applied at least 30 seconds before the application of anode voltage.

HALF-WAVE RECTIFIER

Maximum Ratings (For power-supply frequency of 60 cps):

PEAK INVERSE ANODE VOLTAGE	5000 max	10000 max	volts
ANODE CURRENT:			
Peak	5 max	5 max	amperes
Average ϕ	1.25 max	1.25 max	amperes
Fault, for duration of 0.2 second maximum	50 max	50 max	amperes
CONDENSED-MERCURY-TEMPERATURE RANGE°	20 to 70	20 to 60	°C

ϕ Averaged over any interval of 15 seconds maximum.

• Operation at 40° ± 5°C is recommended.

Operating Values:

<i>Circuit</i> (For circuit figures, refer to <i>Rectifier Considerations</i> Section)	<i>Fig.</i>	<i>Max. Trans.</i> <i>Sec. Volts</i> (RMS) <i>E</i>	<i>Approx. DC</i> <i>Output Volts</i> <i>To Filter</i> <i>E_{av}</i>	<i>Max. DC</i> <i>Output</i> <i>Amperes</i> <i>I_{av}</i>	<i>Max. DC</i> <i>Output KW</i> <i>To Filter</i> <i>P_{dc}</i>
In-Phase Operation					
Half-Wave Single-Phase...	54	7000* 3500^	3200 1600	1.25 1.25	4.0 2.0
Full-Wave Single-Phase...	55	3500* 1700^	3200 1600	2.5 2.5	8.0 4.0
Series Single-Phase.....	56	7000* 3500^	6400 3200	2.5 2.5	16.0 8.0
Half-Wave Three-Phase...	57	4000* 2000^	4800 2400	3.75 3.75	18.0 9.0

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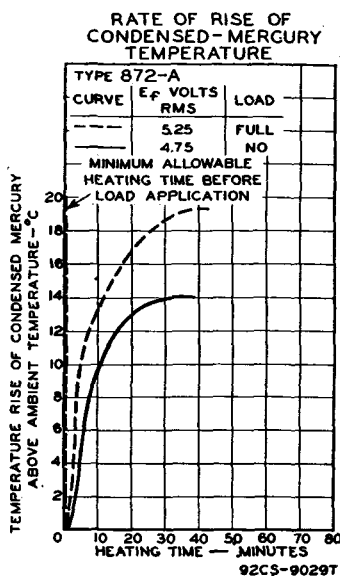
Circuit (For circuit figures, refer to Rectifier Considerations Section)	Fig.	Max. Trans. Sec. Volts (RMS) E	Approx. DC Output Volts To Filter E _{av}	Max. DC Output Amperes I _{av}	Max. DC Output KW To Filter P _{dc}
Quadrature Operation					
Parallel Three-Phase.....	58	4000* 2000 ^Δ	4800 2400	7.5 7.5	36.0 18.0
Series Three-Phase.....	59	4000* 2000 ^Δ	9600 4800	3.75 3.75	36.0 18.0
Half-Wave Four-Phase....	60	3500* 1700 ^Δ	4500 2250	4.5* 5.0 [■] 4.5* 5.0 [■]	20.0* 22.5 [■] 10.0* 11.2 [■]
Half-Wave Six-Phase.....	61	3500* 1700 ^Δ	4800 2400	4.75* 5.0 [■] 4.75* 5.0 [■]	22.8* 24.0 [■] 11.4* 12.0 [■]

* For maximum peak inverse anode voltage of 10000 volts and maximum average anode current of 1.25 amperes.

^Δ For maximum peak inverse anode voltage of 5000 volts and maximum average anode current of 1.25 amperes.

* Resistive load.

■ Inductive load.



MEDIUM-MU TRIODE

Acorn heater-cathode type used as af amplifier and as rf amplifier and oscillator at frequencies up to 600 Mc. Class A₁ Amplifier maximum CCS plate dissipation (design-center value),

1.6 watts. Requires Acorn five-contact socket and may be mounted in any position. OUTLINE 2, Outlines Section. Plate shows no color when tube is operated at maximum CCS ratings.

HEATER VOLTAGE (AC/DC).....	6.3	volts
HEATER CURRENT.....	0.15	ampere
DIRECT INTERELECTRODE CAPACITANCES:		
Grid to plate.....	1.3	μf
Grid to cathode and heater.....	1.0	μf
Plate to cathode and heater.....	0.4	μf

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