

HALF-WAVE RECTIFIER

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

PEAK INVERSE ANODE VOLTAGE	2000 max	5000 max	volts
ANODE CURRENT:			
Peak	15 max	15 max	amperes
Average ‡	2.5 max	2.5 max	amperes
Fault, for duration of 0.1 second maximum	200 max	200 max	amperes
CONDENSED-MERCURY-TEMPERATURE RANGE	30 to 80	30 to 60	°C

‡ Averaged over any interval of 15 seconds maximum.

Operating Values:

Circuit (For circuit figures, refer to Rectifier Considerations Section)	Fig.	Max. Trans. Sec. Volts (RMS) E	Approx. DC Output Volts To Filler E _{av}	Max. DC Output Amperes I _{av}	Max. DC Output KW To Filler P _{dc}
In-Phase Operation					
		3500*	1600	2.5	1.5
Half-Wave Single-Phase...	54	1400*	600	2.5	4.0
		1700*	1600	5.0	8.0
Full-Wave Single-Phase...	55	700*	600	5.0	3.0
		3500*	3200	5.0	16.0
Series Single-Phase.....	56	1400*	1300	5.0	6.0
		2000*	2400	7.5	18.0
Half-Wave Three-Phase...	57	800*	950	7.5	7.0
Quadrature Operation					
		2000*	2400	15.0	14.0
Parallel Three-Phase.....	58	800*	950	15.0	36.0
		2000*	4800	7.5	36.0
Series Three-Phase.....	59	800*	1900	7.5	14.0
		1700*	2300	13.5* 15.0*	31.0* 34.5*
Half-Wave Four-Phase....	60	700*	900	13.5* 15.0*	12.0* 13.5*
		1700*	2400	14.2* 15.0*	13.5* 14.0*
Half-Wave Six-Phase.....	61	700*	950	14.2* 15.0*	33.1* 34.0*

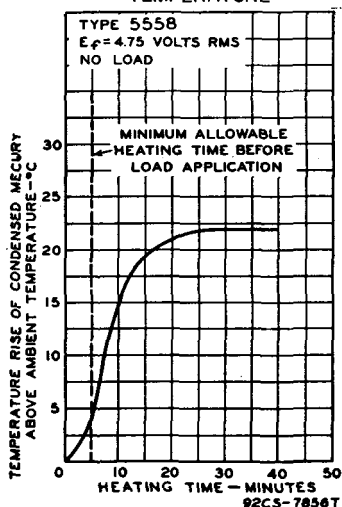
* For maximum peak inverse anode voltage of 5000 volts and maximum average anode current of 2.5 amperes.

† For maximum peak inverse anode voltage of 2000 volts and maximum average anode current of 2.5 amperes.

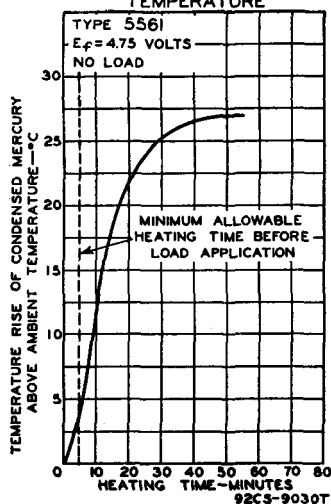
* Resistive load.

■ Inductive load.

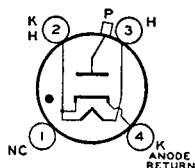
RATE OF RISE OF
CONDENSED-MERCURY
TEMPERATURE



RATE OF RISE OF
CONDENSED-MERCURY
TEMPERATURE



HALF-WAVE MERCURY-VAPOR RECTIFIER



5561

Heater-cathode type used in power supply of transmitting and industrial equipment. Rating I: maximum peak inverse anode volts, 3,000; maximum average anode amperes, 6.4.

Rating II: maximum peak inverse anode volts, 10,000; maximum average anode amperes, 4. Requires Super-Jumbo four-contact socket and may be mounted in vertical position only, base down. OUTLINE 61, *Outlines* Section. For curve showing rate of rise of condensed-mercury temperature see preceding page.

HEATER VOLTAGE*	5	volts
HEATER CURRENT	10	amperes
PEAK TUBE VOLTAGE DROP (Approx.)	15	volts

• Heater voltage must be applied at least 5 minutes before application of anode voltage.

HALF-WAVE RECTIFIER

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

PEAK INVERSE ANODE VOLTAGE	3000 max	10000 max	volts
ANODE CURRENT:			
Peak	40 max	16 max	amperes
Average [‡]	6.4 max	4 max	amperes
Fault, for duration of 0.1 second maximum	400 max	160 max	amperes
CONDENSED-MERCURY-TEMPERATURE RANGE	40 to 80	25 to 50	°C

‡ Averaged over any interval of 15 seconds maximum.

Operating Values:

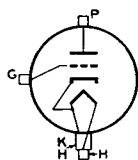
Circuit (For circuit figures, refer to Rectifier Considerations Section)	Fig.	Max. Trans. Sec. Volts (RMS) E	Approx. DC Output Volts To Filter E _{av}	Max. DC Output Amperes I _{av}	Max. DC Output KW To Filter P _{dc}
In-Phase Operation					
Half-Wave Single-Phase...	54	2100*	950	6.4	6.0
Full-Wave Single-Phase...	55	1000*	950	12.8	12.0
Series Single-Phase...	56	2100*	1900	12.8	24.0
Half-Wave Three-Phase...	57	1200*	1450	19.2	27.5
Quadrature Operation					
Parallel Three-Phase.....	58	1200*	1450	38.4	55.0
Series Three-Phase.....	59	1200*	2850	19.2	55.0
Half-Wave Four-Phase....	60	1000*	1350	36.0* 40.0■	48.5* 54.0■
Half-Wave Six-Phase.....	61	1000*	1450	38.0* 40.0■	54.0* 57.0■

* For maximum peak inverse anode voltage of 3000 volts and maximum average anode current of 6.4 amperes.

* Resistive load.

■ Inductive load.

POWER TRIODE



5588

Forced-air-cooled heater-cathode type having integral radiator used in cathode-drive circuits as rf power amplifier and oscillator. May be used with full input up to 1200 Mc. For operation at 1350 Mc, plate voltage and plate input should be reduced to 90 per cent of maximum ratings; at 1500 Mc, to 89 per cent; at 2000 Mc, to 80 per cent. Type 5588 may be mounted in vertical position only, radiator up or down.

OUTLINE 71, *Outlines* Section. A minimum air flow of 10 cubic feet per minute should be directed through the radiator toward the bulb and grid terminal when the 5588 is operated at maximum rated dissipation.