RCA

5560

THYRATRON

MERCURY-VAPOR TETRODE

DATA

Electrical:

Heater, for Unipotential Cathode:			
Voltage	5.5□	5.0	volts
Current	5.0□	4.5	amp
Cathode:			
Minimum Heating Time, prior to tube conduction		5	minutes
Direct Interelectrode Capacitances (Approx.):			
Grid No.1 to Anode		0.2	μμf
Grid No.1 to Cathode		4.4	μμf ←
Ionization Time (Approx.)		10	μsec
Deionization Time (Approx.)		1000	μsec
Anode Voltage Drop (Approx.)		16	volts
Grid-No.1 Control Ratio (Approx.) with grid-No.1 resistor (ohms) = 0; grid-No.1 and grid-No.2 volts = 0			170 ←
Grid-No.2 Control Ratio (Approx.) with grid No.1 resistor (ohms) = 0; grid-No.1 and grid-No.2 volts = 0			300 ←

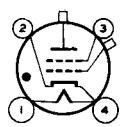
Mechanical:

Mounting Position	Vertical, Base Down
Overall Length	7-11/16" ± 1/4"
Seated Length	7-1/16" ± 1/4" ←
Greatest Radius	2-1/4"
Bulb	ST-23
Caps (Two)	Medium
Base	Medium-Shell Small 4-Pin, Bayonet
Basing Designation for BOTTOM VIEW	4CD

Pin 1 - Heater

Pin 2 - Cathode; Circuit Returns

Pin 3 - Grid No.2



Pin 4 - Heater, Cathode

Top Cap - Anode

Side Cap - Grid No.1

Maximum Ratings, *Absolute Values*:

PEAK ANODE VOLTAGE:		
Forward	1000 max.	volts
Inverse	1000 max.	volts
GRID-No.2 (SHIELD-GRID) VOLTAGE:		
Before Conduction	-300 max.	volts
During Conduction	-5 max.	volts
GRID-No.1 (CONTROL-GRID) VOLTAGE:		
Before Conduction	-1000 max.	volts
During Conduction	-10 max.	volts ←
CATHODE CURRENT:		
Peak	30 max.□ 15 max.	amp
Average**	0.5 max.□ 2.5 max.	amp
Fault, for 0.1 sec. maximum	200 max.	amp

□ **; See next page.

←Indicates a change.

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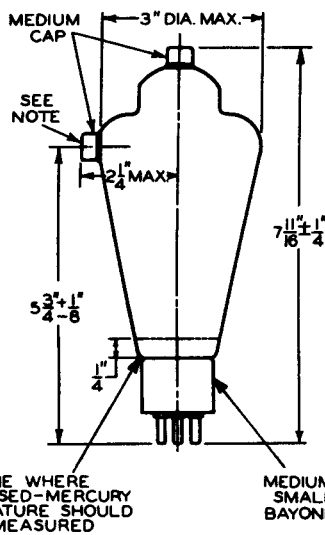
GRID-No.2 CURRENT:		
Average**	0.25 max.	amp
GRID No.1 CURRENT:		
Average**	0.25 max.	amp
COND.-MERCURY TEMPERATURE RANGE▲	+40 to +80	°C
OPERATING FREQUENCY	150 max.	cps

□ Applies when this tube is used for ignitor firing.
** Averaged over any interval of 15 sec. max.
▲ Recommended operating temperature is 40°C.



92CS-6742R1

NOTE: THE PLANE THROUGH TUBE AXIS AND CENTER OF GRID-№1 CAP IS 45°±5° FROM THE PLANE THROUGH THE TUBE AXIS AND CENTER OF BAYONET PIN. GRID-№1 CAP IS ON SAME SIDE AS PIN №3.

TEMPERATURE-RISE CHARACTERISTIC of the 5560 is the same as that shown for Type 5559

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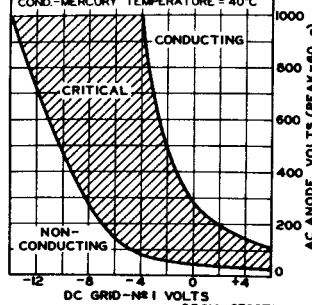
OPERATIONAL RANGE OF CRITICAL GRID VOLTAGE

TYPE 5560
RANGE IS FOR CONDITIONS WHERE: E_f = 5 VOLTS AC ±5 %; GRID-№ 2 (SHIELD) VOLTS = 0; CIRCUIT RETURNS TO PIN № 2. THE RANGE INCLUDES INITIAL AND LIFE VARIATIONS OF INDIVIDUAL TUBES, AS WELL AS CHANGE IN CHARACTERISTICS DUE TO HEATER PHASING.
GRID-№ 1 RESISTOR (OHMS) = 0
COND.-MERCURY TEMPERATURE = 40°C

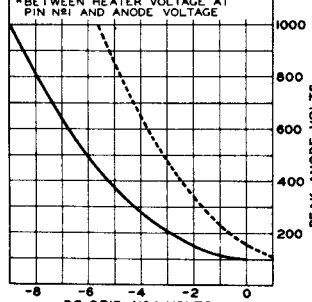


SHIFT OF AVERAGE CONTROL CHARACTERISTIC WITH CHANGE IN HEATER PHASING

TYPE 5560 E_f = 5 VOLTS AC
GRID-№ 2 (SHIELD) VOLTS = 0
CONDENSED-MERCURY TEMPERATURE = 40°C
GRID-№ 1 RESISTOR (OHMS) = 0

CURVE	PHASE ANGLE DEGREES *	CIRCUIT RETURN
———	180°	PIN №2
- - - -	0°	PIN №2

*BETWEEN HEATER VOLTAGE AT PIN №1 AND ANODE VOLTAGE



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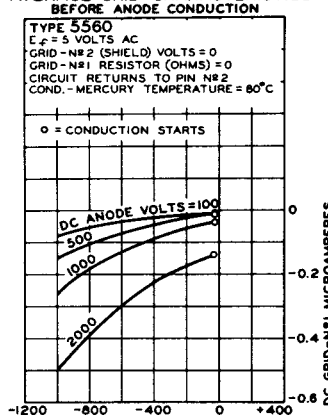
AVERAGE GRID CHARACTERISTICS
BEFORE ANODE CONDUCTION



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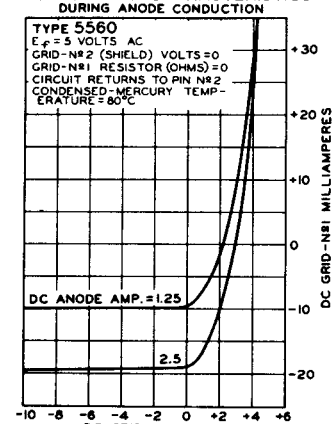
AVERAGE GRID CHARACTERISTICS
DURING ANODE CONDUCTION



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