C16J/5665

XENON THYRATRON

NEGATIVE-CONTROL TRIODE TYPE

GENERAL DATA

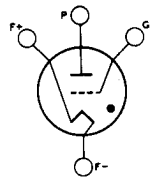
Electrical:

	Min.	Av.	Max.	
Filament, Coated:				
Voltage	2.4	2.5	2.6	ac or dc volts
Current at 2.5 volts	28	31	34	amp
Minimum heating time prior to tube conduction			60	sec
Direct Interelectrode Capacitances (Approx.):				
Grid to anode			8	μμf
Grid to cathode			29	μμf
Maximum Deionization Time			1000	μsec
Maximum Critical Grid Current			10	μamp
Anode Voltage Drop:				
Average, at beginning of life			11	volts
Maximum, at end of life			14	volts
Maximum Commutation Factor♦, averaged over first 330 volts of inverse anode voltage rise			0.66	$va/\mu s^2$
Grid Control Ratio (Approx.): For conditions: 10000-ohm grid resistor, circuit returns to filament transformer center-tap, filament lead F- negative with respect to filament lead F+ during conduction period, dc anode voltage and dc grid voltage			270	

Mechanical:

Mounting Position	Vertical, base down
Tube and Base Bracket Dimensions	*See Dimensional Outline*
Weight (Approx.)	14 oz
Bulb	T-20
Terminal Connections	*See Dimensional Outline*

BOTTOM VIEW



F- - Filament Lead

F+ - Filament Lead

G - Grid Lead

P - Anode Lead (On end opposite bracket)

GRID-CONTROLLED RECTIFIER SERVICE

Maximum Ratings, *Absolute Values:*

PEAK ANODE VOLTAGE:			
Forward	1000 max.	1000 max.	volts
Inverse	1250 max.	1250 max.	volts

♦ Defined as the product of the rate of current decay in amperes per microsecond just before conduction ceases and the rate of inverse voltage rise in volts per microsecond following current conduction.

TENTATIVE DATA

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GRID VOLTAGE:			
Peak, before tube conduction	-100 max.	-100 max.	volts
ANODE CURRENT:			
Peak	160 max.	100 max.	amp
Average●	16 max.	18 max.	amp
Overload:			
Rating I*, for duration of. . 1 sec.	72 max.	81 max.	amp
Rating I*, for duration of. . 2 sec.	36 max.	40.5 max.	amp
Rating I*, for duration of. . 3 sec.	24 max.	27 max.	amp
Rating I*, for duration of. . 3.5 sec.	21 max.	22.8 max.	amp
Rating I*, for duration of. . 4 sec.	18 max.	20.3 max.	amp
Rating II**, for duration of. . 3 sec.	24 max.	-	amp
Rating II**, for duration of. . 3.5 sec.	23 max.	22.8 max.	amp
Rating II**, for duration of. . 4 sec.	22 max.	22.5 max.	amp
Rating II**, for duration of. . 4.5 sec.	21.3 max.	22 max.	amp
Fault, for duration of 0.1 second maximum	1000 max.	1000 max.	amp
AMBIENT-TEMPERATURE RANGE	-55 to +75	-55 to +75	°C

● Averaged over any period of 4.5 seconds.

* Averaged over duration of overload occurring no more than once in any period of 4.5 seconds.

** Averaged over duration of overload occurring no more than once in any period of 30 seconds.

OPERATING CONSIDERATIONS

The *anode* of the C16J/5665 will show a red color when the tube is operated at full load.

Sufficient *anode-circuit resistance*, including the tube load, must be used under any conditions of operation to prevent exceeding the current ratings of the tube.

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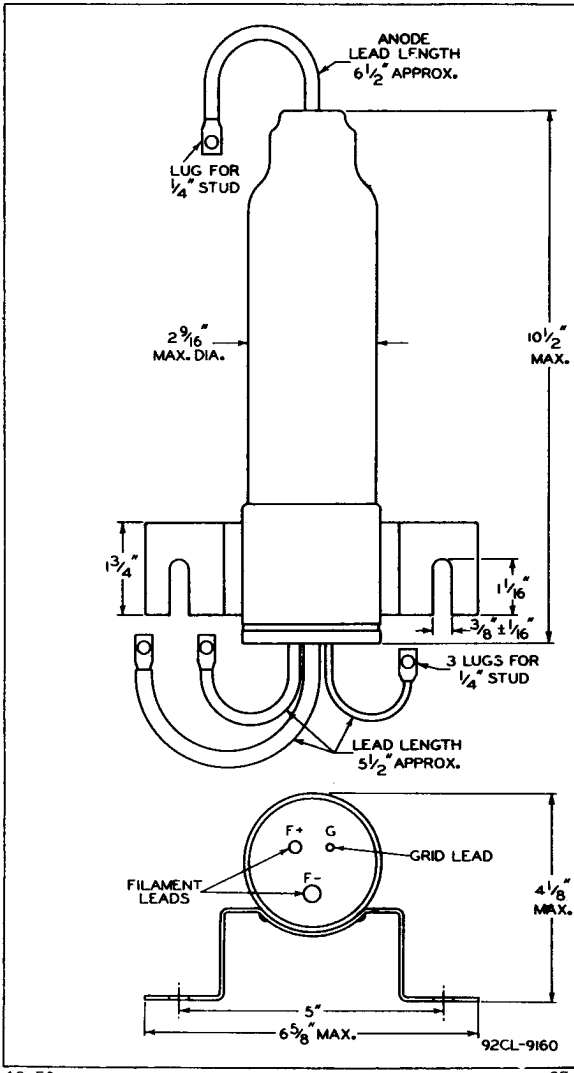

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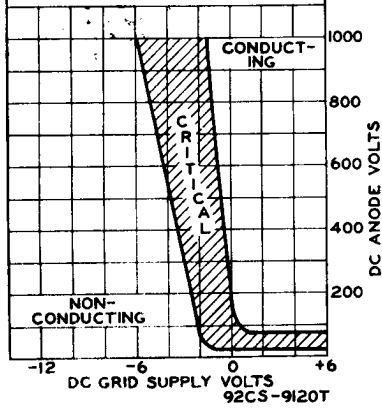
OPERATIONAL RANGE OF CRITICAL GRID VOLTAGE

RANGE IS FOR CONDITIONS WHERE: E_f = 2.5 VOLTS ± 5%; CIRCUIT RETURNS TO FILAMENT TRANSFORMER CENTER-TAP; FILAMENT LEAD F- NEGATIVE WITH RESPECT TO FILAMENT LEAD F+ DURING CONDUCTION PERIOD. THE RANGE INCLUDES INITIAL AND LIFE VARIATIONS OF INDIVIDUAL TUBES. GRID RESISTOR = 0 TO 10000 OHMS. AMBIENT TEMPERATURE RANGE -55 TO +75°C.



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