

## Xenon Thyatron

### NEGATIVE-CONTROL TRIODE TYPE

#### GENERAL DATA

#### Electrical:

	Min.	Av.	Max.	
Filament, Coated and Mid-Tapped:				
Voltage (AC or DC) between pins 2 and 3 . . . . .	2.4	2.5	2.6	volts
Current . . . . .	7	9	11	amp
Minimum heating time prior to tube conduction. . . . .			30	sec
Direct Interelectrode Capacitances (Approx.):				
Grid to anode . . . . .		2		$\mu\text{f}$
Ionization Time (Approx.) . . . . .			10	$\mu\text{sec}$
Deionization Time (Approx.) . . . . .			1000	$\mu\text{sec}$
Maximum Critical Grid Current . . . . .			10	$\mu\text{a}$
Anode Voltage Drop at peak anode amperes = 10. . . . .			10	volts
Maximum Commutation Factor <sup>a</sup> averaged over first 350 volts of inverse anode-voltage rise. . . . .		0.66		$\text{va}/\mu\text{sec}^2$

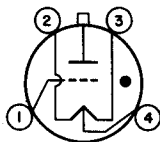
#### Mechanical:

Operating Position. . . . .	Any
Maximum Overall Length. . . . .	6-3/4"
Maximum Seated Length . . . . .	6"
Maximum Diameter. . . . .	2-3/16"
Weight (Approx.) . . . . .	3 oz
Cap . . . . .	Medium (JEDEC No. C1-5)
Base. . . . .	Special Metal Shell
Terminal Diagram:	BOTTOM VIEW

Pin 1 - Grid

Pin 2 - Filament

Pin 3 - Filament



Pin 4 - Filament Tap & Circuit Returns  
Cap - Anode

#### GRID-CONTROLLED-RECTIFIER SERVICE

#### Maximum and Minimum Ratings, Absolute-Maximum Values:

For anode supply frequency of 60 cps

#### PEAK ANODE VOLTAGE:

Forward . . . . .	900 max.	volts
Inverse . . . . .	1250 max.	volts

#### PEAK NEGATIVE GRID VOLTAGE:

Before tube conduction. . . . .	100 max.	volts
During tube conduction. . . . .	10 max.	volts



**ANODE CURRENT:**

Peak . . . . .	30 max.	amp
Average <sup>b</sup> . . . . .	2.5 max.	amp
Fault . . . . .	300 max.	amp

AMBIENT-TEMPERATURE RANGE during operation . -55 to +75 °C

<sup>a</sup> 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.

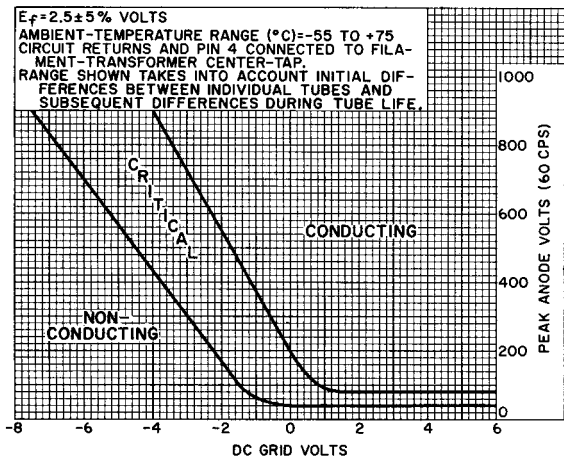
<sup>b</sup> Averaged over any period of 4.5 seconds.

**OPERATING CONSIDERATIONS**

Circuit returns should be connected to filament mid-tap (Pin 4).

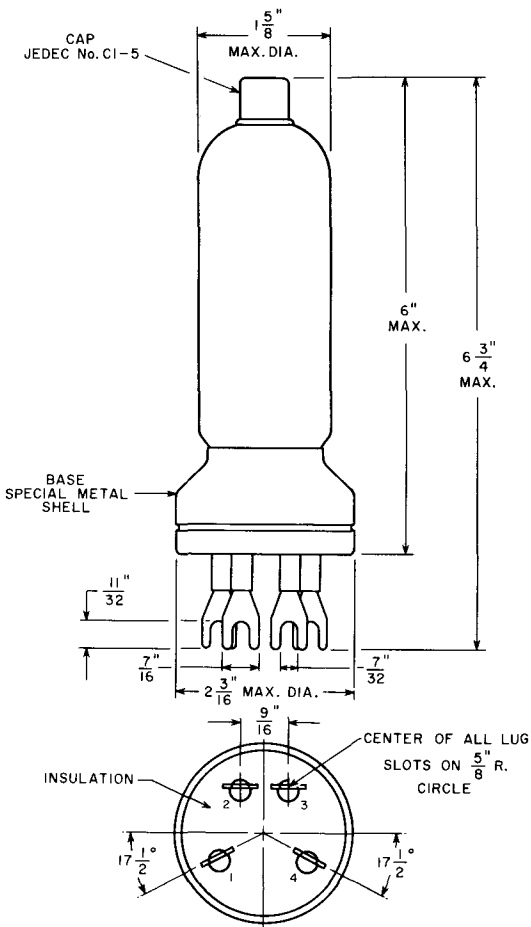
Sufficient anode-circuit resistance, including the tube load, must be used under any conditions of operation to prevent exceeding the maximum current ratings of the tube.

**OPERATIONAL RANGE OF CRITICAL GRID VOLTAGE**



92CS-11323





92CM-11314

