## ELECTRON TUBE DATA SHEET

# WESTERN ELECTRIC 395A ELECTRON TUBE



#### DESCRIPTION

The 395A electron tube is a ruggedized three-electrode inert-gas-filled cold cathode tube for use primarily in triggering circuits. This tube is designed to withstand a 1000 G centrifuge test. The 395A is also suitable for use in control circuits such as in relay, counting or switching apparatus. Small size and provisions for wiring directly into the circuits makes this tube especially suitable for use in small equipment.

#### CHARACTERISTICS

Peak Anode Voltage · · · · · ·	 	 •	140 volts
Average Cathode Current · · · ·			35 milliamperes
Average Life, Approximate · · ·			10 hours

File: Cold Cathode Section

Indicates a change

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Peak Anode Voltage (Note 2)					
Forward				140	volts
Inverse				140	volts
Forward Cathode Current (Note 3)					
Peak				35	milliamperes
Average				13	milliamperes
Averaging Time				1	
-Peak Inverse Current, Anode or Starter (Note 3).				1	milliampere
Ambient Temperature Limits			-55 t	o +85	centigrade
Starter Breakdown Voltage (Notes 2 & 4)		71	80	84	volts
Starter Voltage Drop at 10 Milliamperes		52	65	74	volts
Anode Voltage Drop at 10 Milliamperes		68	80	85	volts
Transfer Current		00	00		Curve - Fig. 1
		10	_	-	microamperes
		-	2	_	
Required Transfer Current at 130 Anode Volts .		_	0.05	_	
Required Transfer Current at 130 Anode Volts . Deionization Time, Main Gap					
Required Transfer Current at 130 Anode Volts .	•				

### HANDLING

Net Weight, Approximate......

This tube contains a small amount of krypton-85 gas which is a by-product radioactive material. The amount of krypton-85 is less than five microcuries, which is too small an amount to require any special care in use.

Atomic Energy Commission regulations require that the individual tube carton for tubes containing by-product radioactive material be appropriately marked. The marking includes the statement that tube disposal should be in approved manner.

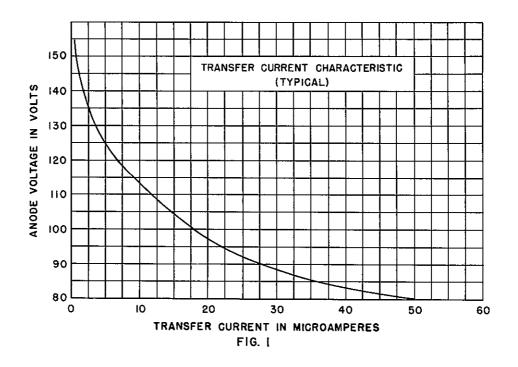
Approved instructions for disposal of tubes containing krypton-85 are as follows;

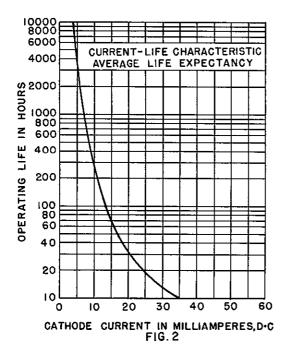
Tubes to be disposed of should be broken or crushed in a well ventilated place releasing any resulting vapors to the outside atmosphere. The residual broken or crushed tubes should be disposed of in a normal public trash disposal system. Tubes should be disposed of at a rate of not more than 100 each week from any one location. Avoid breathing vapors from broken tubes.

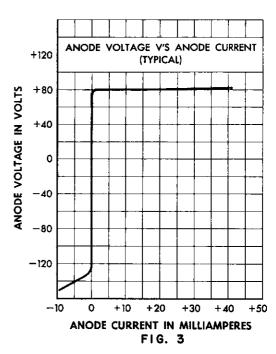
- Note 1: In the "Absolute System" the maximum ratings specified are limiting values above which the serviceability of the device may be impaired from the viewpoint of life and satisfactory performance. Maximum ratings, as such, do not constitute a set of operating conditions and all values may not, therefore, be attained simultaneously.
- Note 2: Values apply with the tube exposed to light in the order of 5 to 30 foot-candles. Exposure to direct sunlight may reduce peak anode voltage rating by as much as 45 volts and starter breakdown voltage as much as 5 volts.

0.4 ounce

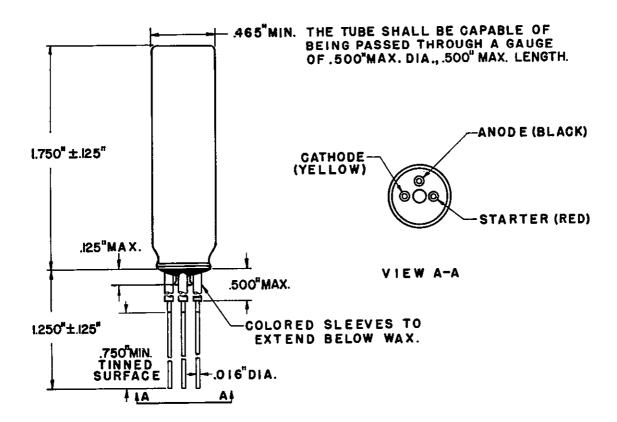
1000 G







- Note 3: Sufficient resistance must be used in series with the tube to assure that the electrode currents do not exceed their maximum rated values.
- Note 4: Limits apply immediately after the tube has conducted current. If the tube has been idle, initially these values may be as much as 3 volts higher or lower.
- Note 5: With 15 volts starter overvoltage. This value applies with the tube exposed to light in the order of 5 to 30 foot-candles. In total darkness ionization time will increase to a bogey of 5 milliseconds.
- Note 6: Determined by centrifuge test.



A development of Bell Telephone Laboratories, the research laboratories of the American Telephone and Telegraph Company and the Western Electric Company.