
ELECTRON TUBE DATA SHEET
WESTERN ELECTRIC 6388* ELECTRON TUBE



DESCRIPTION

The 6388/443A* is a three-electrode inert-gas filled miniature cold cathode tube for use in relay, voltage regulator or rectifier circuits. This tube is especially suitable for use in control circuits such as in triggering, counting or switching apparatus.

MAXIMUM RATINGS

Peak Anode Voltage		180 volts
Average Cathode Current	7.5	60 milliamperes
Average Life, Approximate	10000	10 hours

MAXIMUM RATINGS, Absolute Values

Forward Peak Anode Voltage	180 volts
Forward Cathode Current ¹	
Peak	60 milliamperes
Average	30 milliamperes
Averaging Time	2 seconds
Peak Inverse Current ¹	
Anode	5 milliamperes
Starter	1 milliampere
Ambient Temperature Limits	-55 to +85 centigrade

ELECTRICAL DATA, Throughout Life

	<u>Min.</u>	<u>Bogey</u>	<u>Max.</u>	
Starter Breakdown Voltage	65	72	85	volts
Starter Voltage Drop at 3 Milliamperes ² . .	53	63	72	volts
Anode Voltage Drop at 10 Milliamperes ^{3,4} . .	63	69	75	volts
Transfer Current	See curve			
Ionization Time, Starter Gap ⁵	--	10	--	milliseconds
Deionization Time, Main Gap	--	6	--	milliseconds
Inverse Current at -120 Volts Anode Potential ⁶	--	--	3	milliamperes

MECHANICAL DATA

Mounting Any Position
 Net Weight 0.7 ounce
 Dimensions and Pin Connections shown in outline drawing on Page 4

- Note 1: Sufficient resistance must be used in series with the tube to assure that the electrode currents do not exceed the maximum rated values.
 Note 2: Starter voltage oscillations of approximately 1 to 10 kilocycles and 12 volts peak-to-peak will be present at starter current values below 0.05 milliampere.
 Note 3: Approximately 95% of tubes will be within limits of ± 2.8 volts from the bogey value.
 Note 4: Anode voltage oscillations of approximately 5 to 20 kilocycles and 3 volts peak-to-peak will be present at anode currents within the ratings.
 Note 5: With 15 volts starter overvoltage (15 volts above Starter Breakdown Voltage).
 Note 6: Negative anode voltage applied through 8000 ohms. Starter connected to anode through 100,000 ohms.

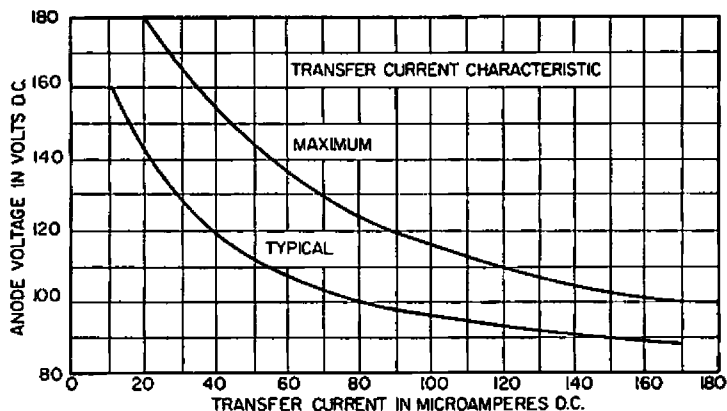
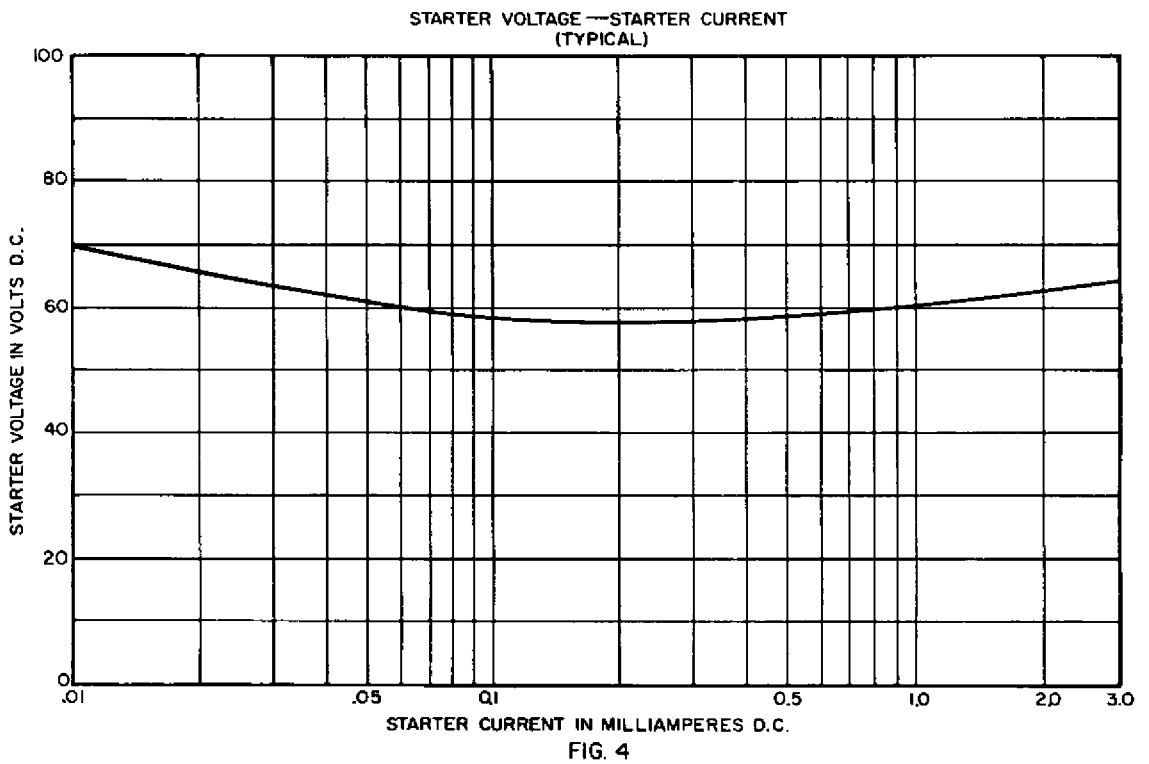
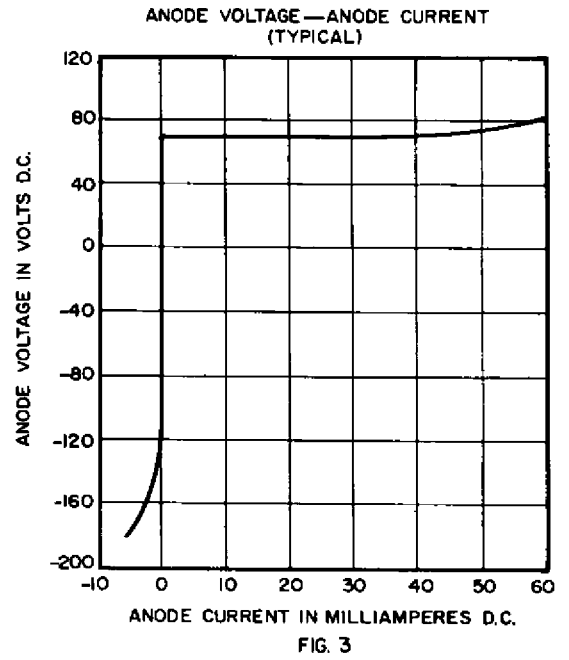
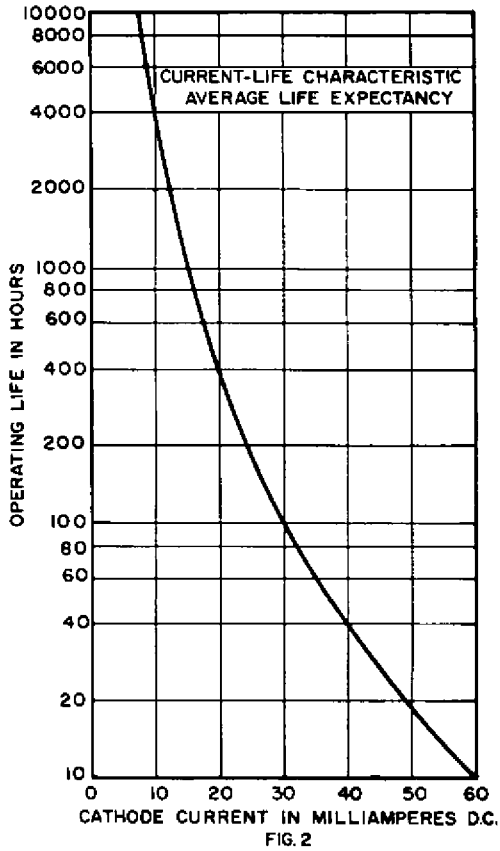
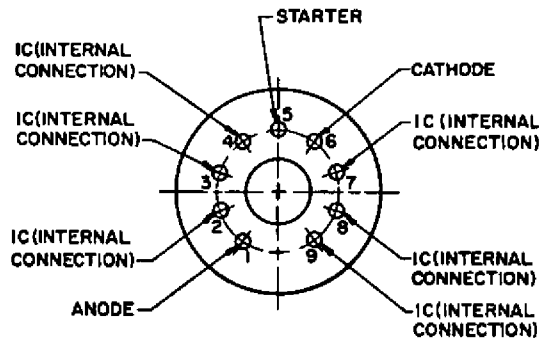
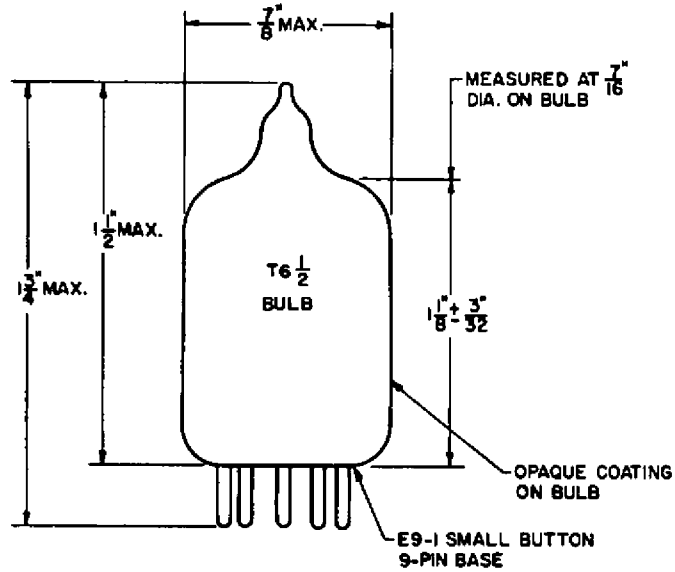


FIG. 1





Note - Pins marked IC (internal connection) should not be connected to any portion of an external circuit. Failure to observe this precaution may result in improper operation of the tube.