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ELECTRON TUBE DATA SHEET  
WESTERN ELECTRIC 423A\* ELECTRON TUBE



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DESCRIPTION

The 6140/423A\* is a two-electrode inert-gas filled cold cathode tube designed primarily for use as a voltage reference tube. This tube has characteristics which are exceptionally stable with life and with variations in ambient temperature.

CHARACTERISTICS

Cathode Current . . . . .	4 to 8 milliamperes
Anode Voltage Drop . . . . .	100 volts
Regulation, Max. (4 to 6 Milliamperes D-C) . . . . .	0.75 volt

FILE: COLD CATHODE SECTION  
ISSUE 3, 11-52

423A\*

RATINGS, Absolute Values

## Cathode Current, Forward

Maximum . . . . .	8 milliamperes
Minimum . . . . .	4 milliamperes
Maximum Inverse Anode Current . . . . .	0.0 milliamperes
Ambient Temperature Limits . . . . .	-55 to + 60 centigrade

ELECTRICAL DATA

	<u>Min.</u>	<u>Bogey</u>	<u>Max.</u>
Anode Breakdown Voltage . . . . .	---	135	160 volts
Anode Voltage Drop at 6 Milliamperes (D-C) <sup>1</sup> . . . . .	99	100	103 volts
Regulation (4 to 6 Milliamperes, D-C) . . . . .	---	0.3	0.75 volt
Temperature Sensitivity of Anode Voltage Drop			
Anode Current, 4 Milliamperes (D-C) . . . . .	---	-0.01	--- volt/c
Anode Current, 8 Milliamperes (D-C) . . . . .	---	-0.02	--- volt/c
Fluctuation <sup>2</sup> . . . . .	---	0.02	0.1 volt
Stability <sup>3</sup> . . . . .	---	0.05	0.2 volt

MECHANICAL DATA

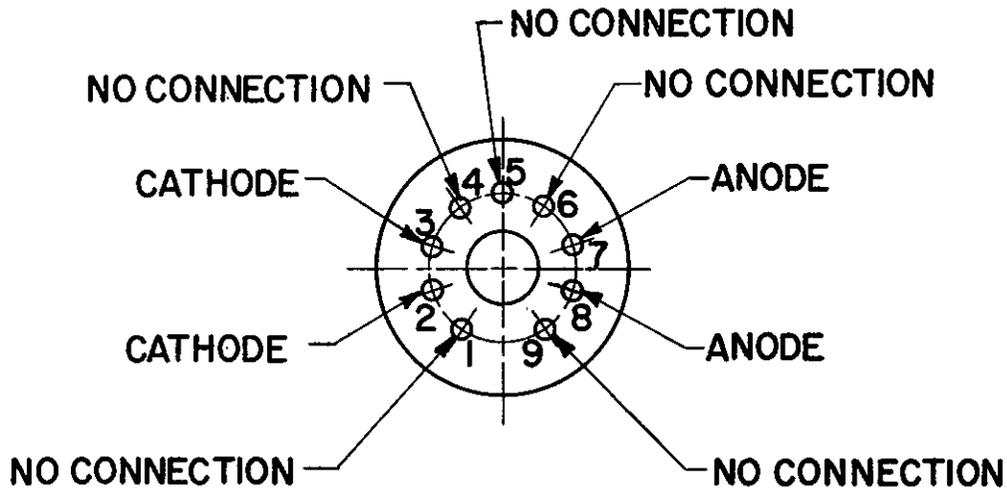
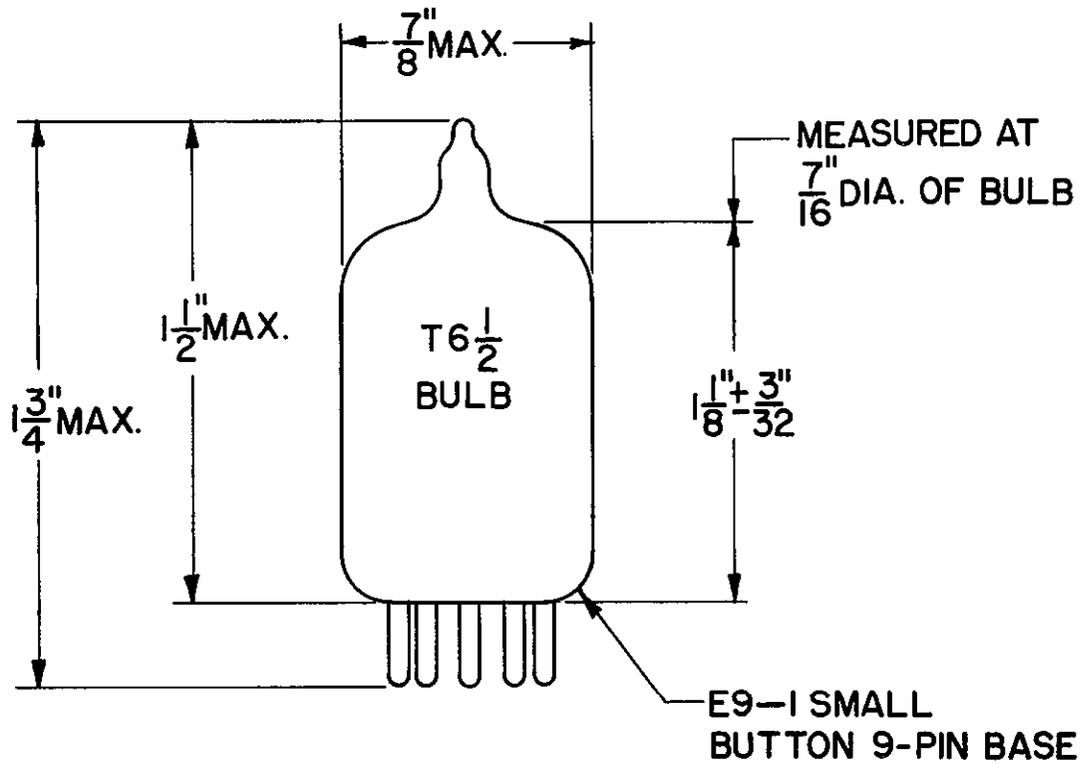
Mounting Position . . . . .	Any
Net Weight, Approximate . . . . .	0.3 ounce
Bulb . . . . .	T 6-1/2
Base . . . . .	Small Button 9-pin

Note 1: These values are for new tubes. Anode voltage drop will stabilize within 3 minutes after starting. The stability characteristic should be considered during tube life.

Note 2: The anode voltage drop variation during a short period of time (one to ten minutes), with the tube operating at one value of current and temperature within its ratings, will not exceed the above stated maximum value.

Note 3: The drift of anode voltage drop over a period of 1000 hours, with the tube operating at one value of current and temperature within its ratings, will not exceed the above stated maximum value.

Note 4: Pins marked "NO 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.



SEE NOTE 4 ON PIN CONNECTIONS

*Western Electric*