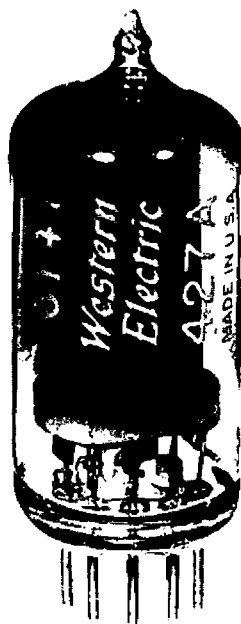


ELECTRON TUBE DATA SHEET
WESTERN ELECTRIC 6141* ELECTRON TUBE



DESCRIPTION

The 6141/427A* is a three-electrode inert-gas-filled cold cathode tube designed for use as a voltage regulator and has characteristics which are exceptionally stable with life and with variation in ambient temperature. The third electrode is primarily a starting element.

CHARACTERISTICS

Cathode Current	5 to 40 milliamperes
Anode Voltage Drop	100 volts
Regulation (Max.) at 5 to 40 milliamperes d-c	1.5 volts

RATINGS, Absolute Values

Cathode Current, Forward	
Maximum	40 milliamperes
Minimum	5 milliamperes
Starter Current, Forward	
Maximum	5 milliamperes
Minimum ¹	0.5 milliampere
Maximum Inverse Starter or Anode Current	0.0 milliampere
Ambient Temperature Limits	-55 to + 85 centigrade

ELECTRICAL DATA

	<u>Min.</u>	<u>Bogey</u>	<u>Max.</u>	
Anode Breakdown Voltage	---	165	---	volts
Anode Voltage Drop at 40 Milliamperes, D-C ²	99	100	103	volts
Regulation (5 to 40 Milliamperes, D-C) ³	---	0.3	1.5	volts
Starter Breakdown Voltage	115	125	135	volts
Starter Voltage Drop at 5 Milliamperes, D-C	100	110	120	volts
Required Transfer Current	See Curve			
Stability ⁴	---	0.1	1.0	volt
Temperature Sensitivity, Anode Voltage Drop				
Anode Current, 5 milliamperes D-C	---	-0.007	---	volt/c
Anode Current, 40 milliamperes D-C	---	-0.004	---	volt/c

MECHANICAL DATA

Mounting Position	Any
Net Weight, Approximate	0.4 ounce
Base	Small Button 9-pin
Bulb	T6-1/2

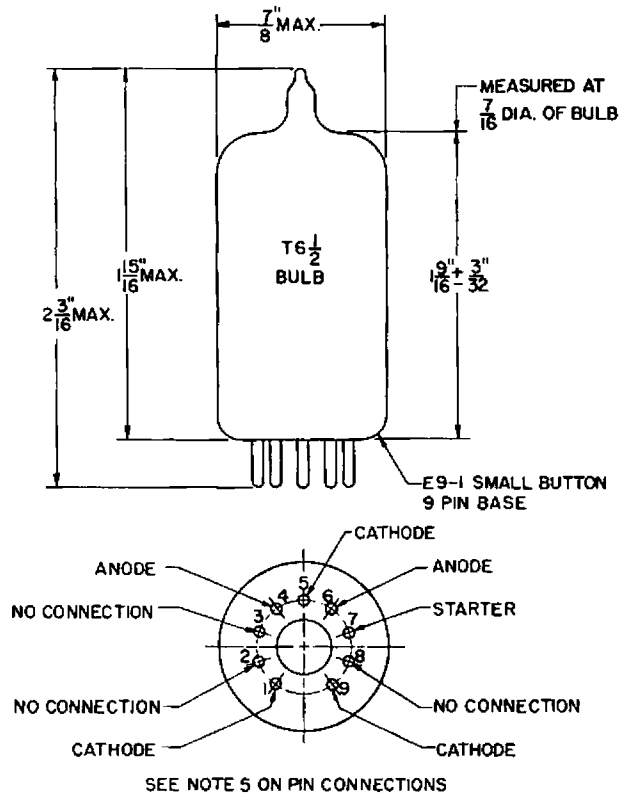
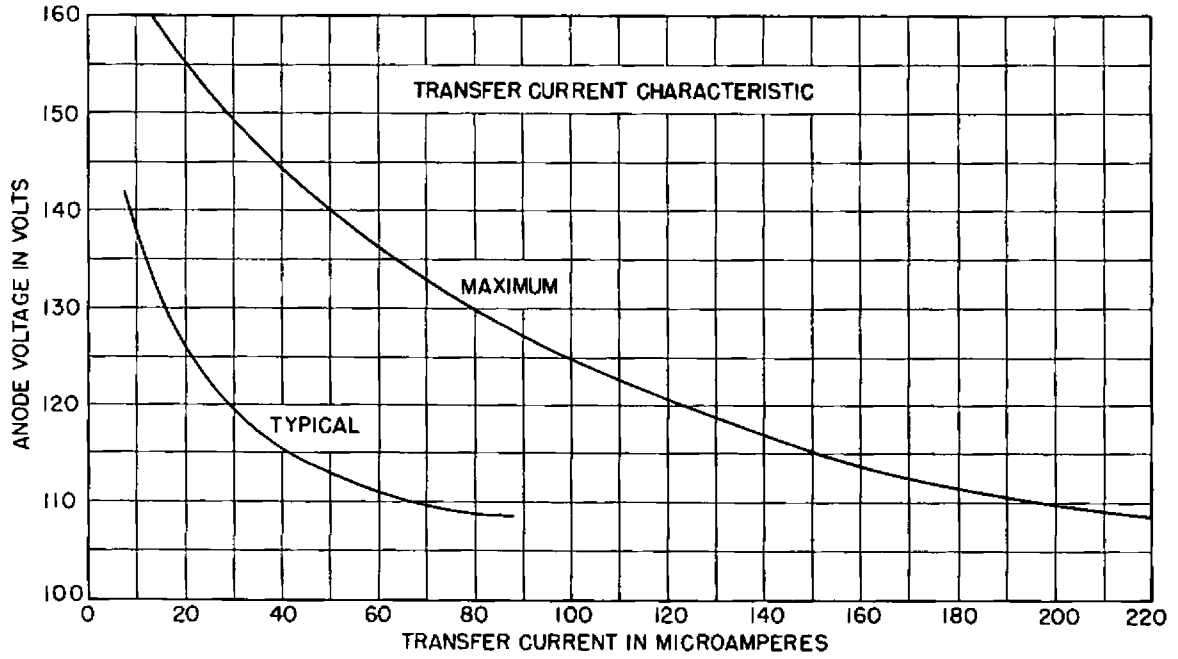
Note 1: The minimum starter current requirement applies only when the tube is operated for extended periods (hundreds of hours) between starting operations to assure maintaining starter breakdown and transfer current characteristics.

Note 2: These values are for new tubes. Anode voltage drop will stabilize within 3 minutes after starting. The stability characteristic should be considered during life.

Note 3: Continuous operation at a current value in the low portion of the operating range for an extended period (hundreds of hours) may result temporarily in regulation exceeding the above stated values.

Note 4: 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. Stability improves with operating life. After 1000-2000 hours operation the drift of anode voltage drop per 1000 hours will not exceed 0.3 volt.

Note 5: 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.



Western Electric