

COLD CATHODE

Western Electric

DESCRIPTION

The 333A is a three-electrode, inert-gas-filled, 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	150 volts
Average Cathode Current	10 100 milliamperes
Average Life, approximate	10000 10 hours
Transfer Current	5 microamperes

MAXIMUM RATINGS, Absolute Values

Forward Peak Anode Voltage	150 volts
Forward Cathode Current	
Peak	100 milliamperes
Average	35 milliamperes
Averaging Time	2 seconds
Peak Inverse Anode Current	5 milliamperes
Ambient Temperature Limits	-55 to +85 centigrade

ELECTRICAL DATA

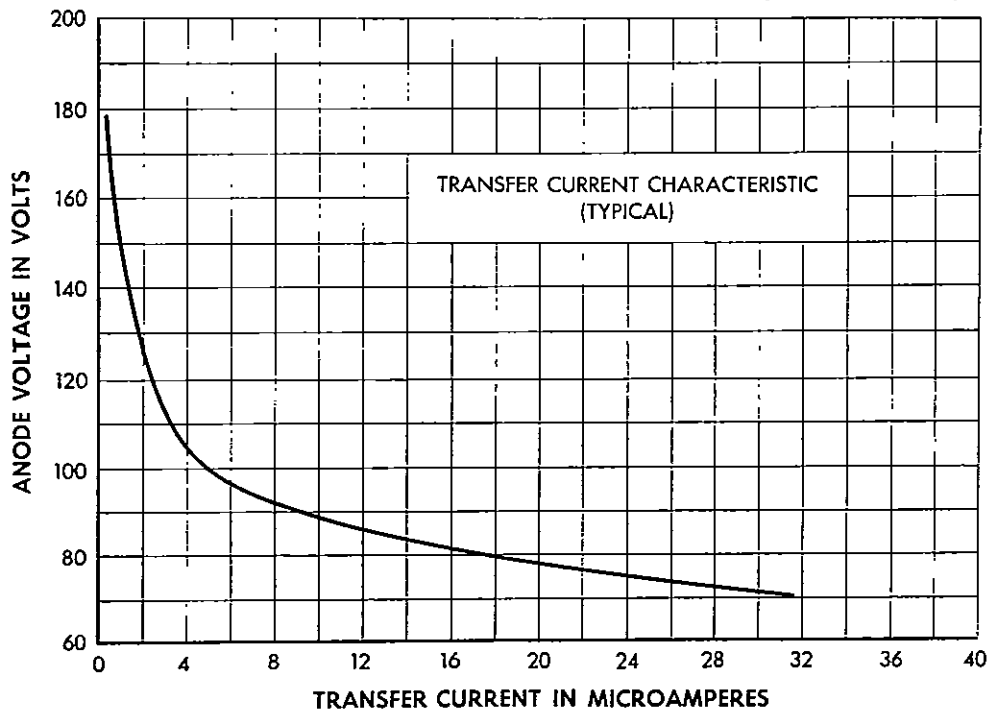
	Min.	Bogey	Max.
Starter Breakdown Voltage*	62	70	89 volts
Starter Voltage Drop at 20 milliamperes	52	60	74 volts
Anode Voltage Drop at 20 milliamperes	68	75	90 volts
Required Transfer Current at 130 Anode Volts (D.C.)	5		microamperes
Deionization Time, approximate			
Starter Gap		3	milliseconds
Main Gap		10	milliseconds
Inverse Current at -120 Volts Anode Potential**			3 milliamperes

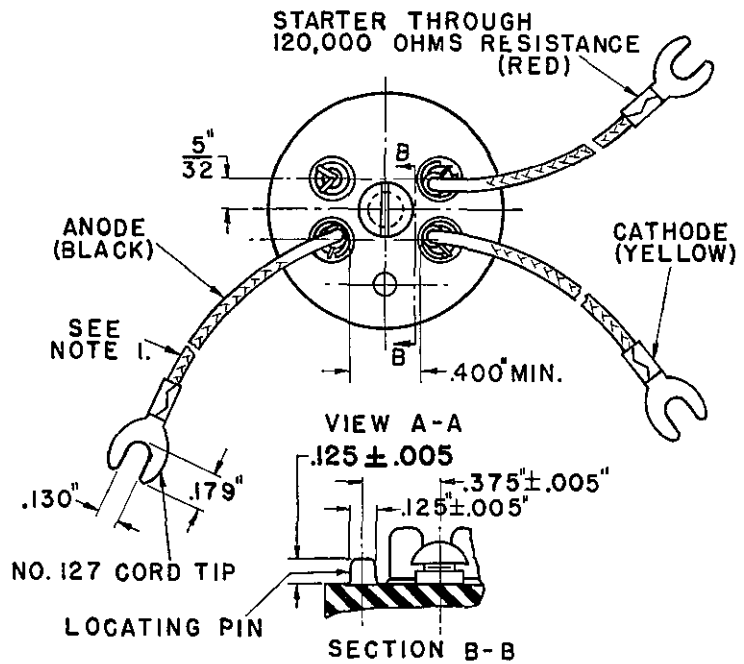
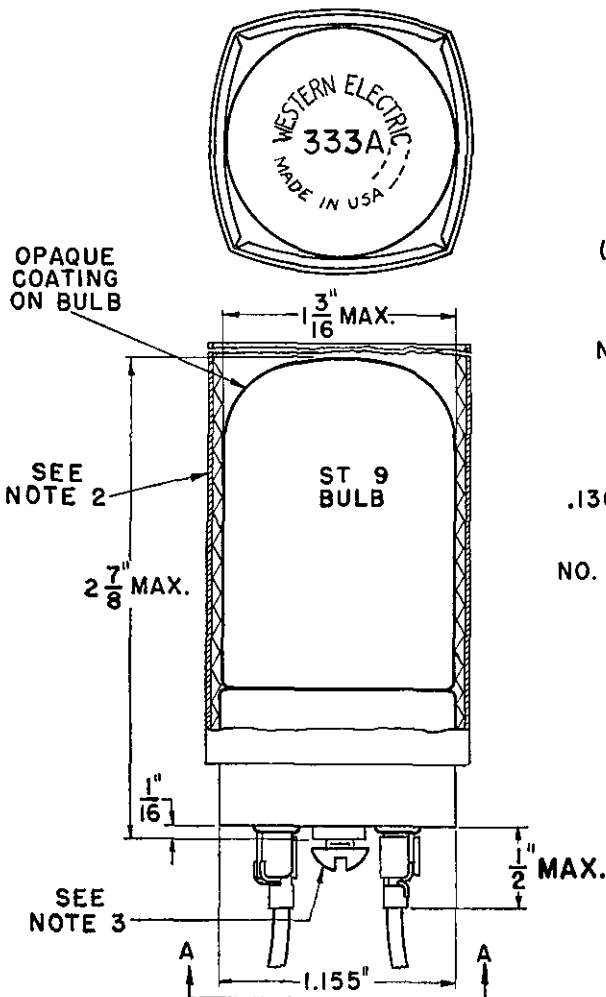
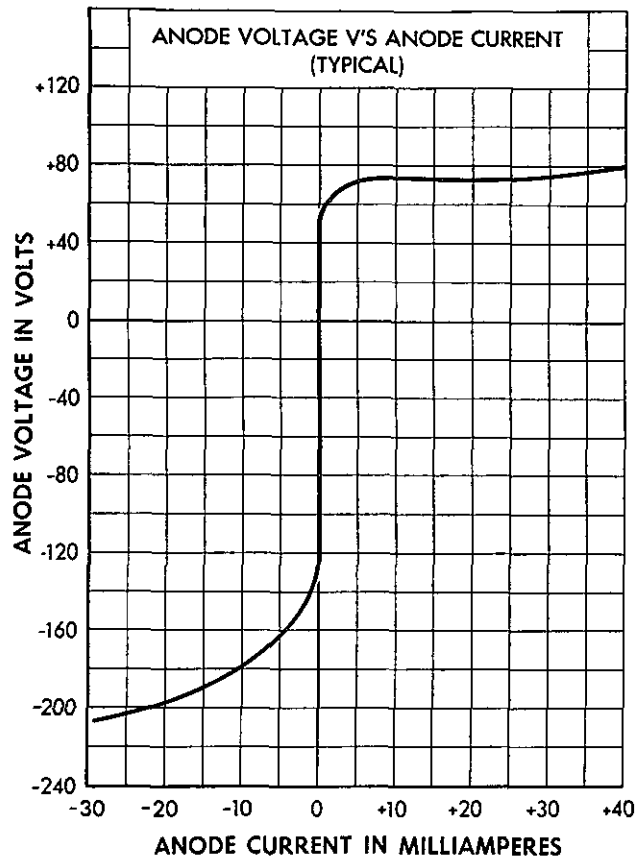
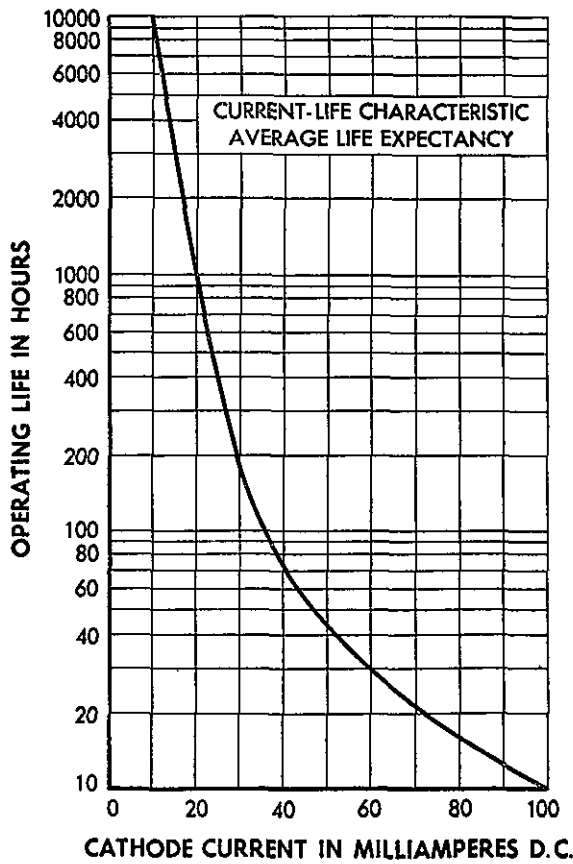
MECHANICAL DATA

Mounting Position	Any
Net Weight, approximate	1 ounce

*Limits apply immediately after tube has conducted current. If tube has been idle, these values initially may be as much as 3 volts higher or lower.

**Negative anode voltage applied through 8,000 ohms. Starter connected to anode through 100,000 ohms.





- NOTES -
1. LENGTH OF LEADS FROM END OF BASE SHELL TO END OF SPADE $117 \frac{1}{32} \pm \frac{1}{2}$
 2. TUBE SHIPPED WITH CORRUGATED PAPER SHOCK PROTECTIVE SLEEVE COVERING ENVELOPE AND PART OF BASE. SLEEVE SHOULD REMAIN ON TUBE WHEN INSTALLED IN TELEPHONE SET APPLICATIONS.
 3. THE $.164 - 32 \times \frac{3}{16}$ SCREW, SUPPLIED WITH TUBE, ALLOWS FOR MOUNTING ON A BUCKET $\frac{3}{64}$ THICK.

Western Electric

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