BELL SYSTEM PRACTICES Transmission Engineering Data Vacuum Tube Data

OK for Plant Dipt use. S. F. H. 6/15/0

SECTION AB 46.405A Issue 2. January 1950

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COLD CATHODE

Western Electric

DESCRIPTION

The 405A is a three-electrode, inert-gasfilled, cold cathode tube for use primarily as a relay in communication circuits. It is also suitable for use in control circuits such as in triggering, counting or switching apparatus. This tube, because of its small size, flexible connector leads and ease in mounting, may be used to advantage in equipment where space is a factor.

MAXIMUM RATINGS

	Peak Anode	Vol	tage									165	volts
	Average Cath	ode	Cur	ren	t.						4	40	milliamperes
	Average Life						•				10000	10	hours

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405 A
COLD CATHODE

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MAXIMUM RATINGS, Absolute Values

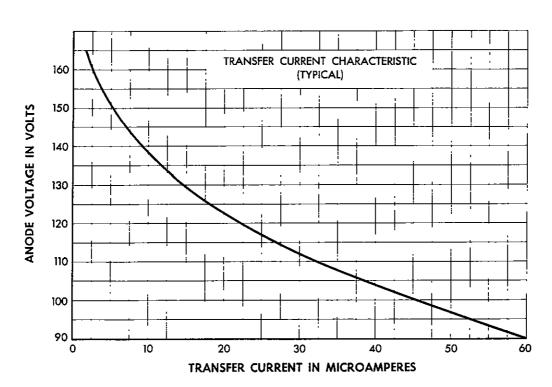
Peak Anode Voltage											
Forward										165 volts	
Inverse		•			•	•				165 volts	
Forward Cathode Current											
Peak										40 milliamperes	
Average										15 milliamperes	
Averaging Time										1 second	
Peak Inverse Anode Current										1 milliampere	
Ambient Temperature Limits.			•			•				-55 to $+85$ centigrade	
ELECTRICAL DATA											

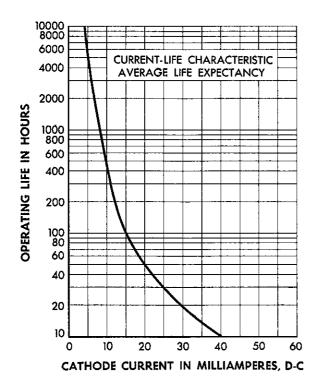
	Mın.	Bogey	Max.								
Starter Breakdown Voltage*	67	<i>7</i> 5	89 volts								
Starter Voltage Drop at 10 milliamperes	52	60	74 volts								
Anode Voltage Drop at 10 milliamperes	66	<i>7</i> 5	90 volts								
Required Transfer Current at 130 Anode Volts (D. C.)	50		microamperes								
Deionization Time, Approximate											
Starter Gap		2	milliseconds								
Main Gap		8	milliseconds								

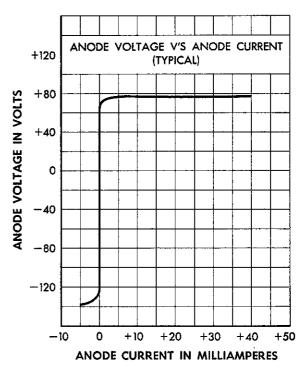
MECHANICAL DATA

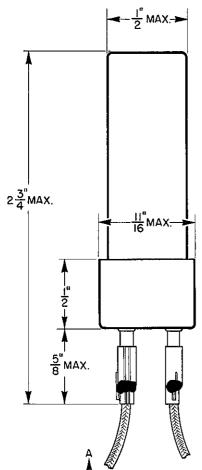
Mounting Position								Any
Net Weight, Approximate								0.4 ounce

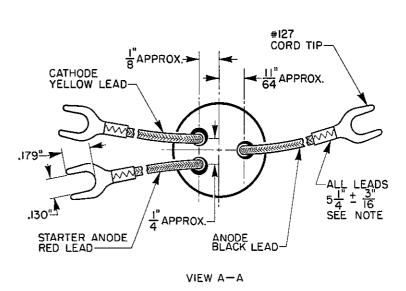
^{*}Limits apply immediately after tube has conducted current. If tube has been idle, these values may be as much as 3 volts higher or lower.











NOTE: LEAD LENGTHS SPECIFIED REFER TO LENGTH FROM END OF BASE SHELL TO END OF SPADE.

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