

VALVE ELECTRONIC CV1705

GENERAL POST OFFICE: E-IN-C (W)

(POVT 156)

Specification: G.P.O./CV 1705/Issue 1 Dated: 30-9-46 To be read in conjunction with K 1001	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center;"><u>SECURITY</u></th> </tr> <tr> <td style="text-align: center;"><u>Specification</u></td> <td style="text-align: center;"><u>Valve</u></td> </tr> <tr> <td style="text-align: center;">Restricted</td> <td style="text-align: center;">Restricted</td> </tr> </table>	<u>SECURITY</u>		<u>Specification</u>	<u>Valve</u>	Restricted	Restricted
<u>SECURITY</u>							
<u>Specification</u>	<u>Valve</u>						
Restricted	Restricted						

—————> indicates a change

<p>TYPE OF VALVE: Pentode</p> <p>CATHODE: -Indirectly heated</p> <p>ENVELOPE: Unmetallised glass</p> <p>PROTOTYPE 58</p>	<p><u>MARKING</u></p> <p>See K 1001/4</p> <hr/> <p><u>BASE</u></p> <p>U.S. Medium 6-pin (U.S.M.6)</p>																																									
<p><u>RATING</u></p>	<p><u>CONNECTIONS</u></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Pin</th> <th style="width: 85%;">Electrode</th> </tr> </thead> <tbody> <tr><td style="text-align: center;">1</td><td>Heater</td></tr> <tr><td style="text-align: center;">2</td><td>Anode</td></tr> <tr><td style="text-align: center;">3</td><td>G2</td></tr> <tr><td style="text-align: center;">4</td><td>G3</td></tr> <tr><td style="text-align: center;">5</td><td>Cathode</td></tr> <tr><td style="text-align: center;">6</td><td>Heater</td></tr> <tr><td style="text-align: center;">TC</td><td>G1</td></tr> </tbody> </table>	Pin	Electrode	1	Heater	2	Anode	3	G2	4	G3	5	Cathode	6	Heater	TC	G1																									
Pin	Electrode																																									
1	Heater																																									
2	Anode																																									
3	G2																																									
4	G3																																									
5	Cathode																																									
6	Heater																																									
TC	G1																																									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr> <td>Heater voltage</td> <td>(V)</td> <td style="text-align: center;">2.5</td> <td rowspan="5" style="text-align: center; vertical-align: middle;">A</td> <td colspan="2"></td> </tr> <tr> <td>Nominal heater current</td> <td>(A)</td> <td style="text-align: center;">1.0</td> <td colspan="2"></td> </tr> <tr> <td>Max. anode voltage</td> <td>(V)</td> <td style="text-align: center;">250</td> <td colspan="2"></td> </tr> <tr> <td>Max. screen voltage</td> <td>(V)</td> <td style="text-align: center;">100</td> <td colspan="2"></td> </tr> <tr> <td>Mutual conductance</td> <td>(mA/V)</td> <td style="text-align: center;">1.6</td> <td colspan="2"></td> </tr> </tbody> </table>							Heater voltage	(V)	2.5	A			Nominal heater current	(A)	1.0			Max. anode voltage	(V)	250			Max. screen voltage	(V)	100			Mutual conductance	(mA/V)	1.6			<p><u>TOP CAP</u></p> <p>See K 1001/A1/D 5.1</p> <hr/> <p><u>DIMENSIONS</u></p> <p>See K 1001/A1/D1</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Dimension</th> <th style="width: 20%;">Min.</th> <th style="width: 20%;">Max.</th> </tr> </thead> <tbody> <tr> <td>A (mm)</td> <td style="text-align: center;">-</td> <td style="text-align: center;">98</td> </tr> <tr> <td>B (mm)</td> <td style="text-align: center;">-</td> <td style="text-align: center;">38</td> </tr> </tbody> </table>	Dimension	Min.	Max.	A (mm)	-	98	B (mm)	-	38
Heater voltage	(V)	2.5	A																																							
Nominal heater current	(A)	1.0																																								
Max. anode voltage	(V)	250																																								
Max. screen voltage	(V)	100																																								
Mutual conductance	(mA/V)	1.6																																								
Dimension	Min.	Max.																																								
A (mm)	-	98																																								
B (mm)	-	38																																								
<div style="border: 1px solid black; padding: 5px; width: fit-content;"> This valve type is obsolete and this specification is for record purposes only. </div>	<p><u>NOTE</u></p> <p>Measured with $V_a = 250$, $V_{g2} = 100$, and $V_{g1} = -3$</p>																																									

TESTS

To be performed in addition to those applicable in K 1001.

	TEST CONDITIONS					TEST	LIMITS		No. Tested	Note
	V _b	V _a	V _{g1}	V _{g2}	V _{g3}		Min.	Max.		
(a)	2.5	-	-	-	-	I _f (A)	0.95	1.16	100%	1
(b)	2.5	250	-3	100	0	I _a (mA)	6.2	10.7	100%	1
(c)	2.5	250	-3	100	0	I _{g2} (mA)	1.3	3.6	100%	1
(d)	2.5	250	-3	100	0	Reverse I _{g1} (μA)	-	0.5	100%	1
(e)	2.5	250	-2.5 -3.5	100	0	g _m (mA/V)	1.2	1.9	100%	1
(f)	2.5	250	-39 -41	100	0	g _m (μA/V)	2.0	25.0	100%	1
(g)	2.5	250	-49 -51	100	0	g _m (μA/V)	1.0	6.0	100%	1

NOTE

1. Before commencing the tests, the valve shall be pre-heated for 10 minutes, the heater voltage being adjusted to 2.5 volts with all other electrodes disconnected.