

Specification M.O.S./CV.2287. Issue 1. Dated 20.4.53. To be read in conjunction with K1001 ignoring clauses 10 and 11.	<table> <tr> <th colspan="2">SECURITY</th></tr> <tr> <td>Specification Restricted</td><td>Tube Unclassified</td></tr> </table>	SECURITY		Specification Restricted	Tube Unclassified
SECURITY					
Specification Restricted	Tube Unclassified				

—————> Indicates a change

<u>TYPE</u> :- Tube, counter, G.M. single ended, gamma.		<u>MARKING</u>	
<u>ENVELOPE</u> :- Glass.		As in K1001/4. Additional markings:-	
<u>PROTOTYPE</u> :- 20th Century Electronics G10HE.		Threshold voltage	
<u>EFFECTIVE ANODE LENGTH</u> :- 120 m.m.		in the form $V_T = \dots\dots\dots V$	
		<u>PACKING</u>	
		As in K1005	
<u>RATING</u>		<u>Note</u>	<u>BASE</u>
			See page 3.
Operating volts, $V_W = V_T + 40$ volts. (Average at 20°C.)	380	A	PIN
			ELECTRODE
Plateau length volts. (Average)	120		1
			2
Plateau Slope %/volt. (Average)	0.05		Anode
			Cathode
Shielded background counts/min. (Average)	35		<u>DIMENSIONS</u>
			See page 3.
Useful life, counts. (Average)	$> 10^9$		<u>Notes:</u>
Temperature coefficient volts/C°. (Average)	0.2		A. All measurements made
			with a load resistance of
Temperature coefficient volts/C°. (max).	0.3		$R = 4.7 \times 10^6$ ohms.
Operating range of temperature C°.	-55 to +40		
Filling Efficiency, γ source. (approx).	100%		
Count rate for 1.0 milli-roentgen/ hr. Radium source. Counts/min.	5600		

TESTS

To be performed at least 4 weeks after manufacture, in addition to those applicable in K1001.

	Test Conditions	Test	Limits		No. Tested
			Min.	Max.	
a	As in K1001/5E.3	Plateau length, L volts	90	-	100% or S
	Input sensitivity 0.5 volts	Plateau slope, S ₀ /volt	-	0.15	100% or S
b	As at (a) above	Threshold voltage V _T	300	370	100% or S
c	Input sensitivity 0.5 V, applied voltage V _W , other conditions as stated in K1001/5E.3.1 and K1001/5E.7.	Shielded background count rate/minute. Limits are irrespec- tive of statistical corrections.	25	50	100% or S
d	As (c) above.	Saturation current μ A.	4.5		T.A.
e	Counter inserted in Neoprene Jacket in Standard atmosphere (15-25°C. Less than 60% relative humidity) Measure at P.D. of 100 volts.	Resistance between pins, ohms.	10 ¹⁰	-	T.A.
f	Counter immersed in water (Base upwards) to within 1/2-in. of base.	Resistance between Cathode and outside of envelope, ohms.	10 ⁹	-	T.A.
g	See K.113, clause 27(c).	Vibration test. Counter shall be undamaged and operate satisfactorily after this test.			T.A.
h	Counter shall pass satisfactorily the climatic tests specified in K.110 and a further five damp heat cycles.				T.A.

NOTE:- All tests shall be made using a counter load resistance of 4.7×10^6 ohms.

