

MINISTRY OF SUPPLY - D.L.R.D./S.R.D.E.

Specification MOS/CV 2486 Issue 1, dated 2.10.58 To be read in conjunction with BS1409 and K1001 excluding clause 5.2		<u>SECURITY</u>	
		<u>Specification</u> Unclassified	<u>Valve</u> Unclassified
Type of Valve Gas-filled Triode Cathode Cold Envelope Glass unmetallised Prototype XC18		<u>Marking</u> See K.1001/4 except that the valve shall only be marked with the CV No., Factory and Date Code	
Rating (All limiting values are absolute)		Note	
		<u>Dimensions and Connections</u>	
Control gap breakdown Voltage	(V) 68		
Control gap maintaining Voltage	(V) 55	A	
Main gap breakdown Voltage	(V) 220		
Main gap maintaining Voltage	(V) 73	B	See drawing on page 4
Transfer Current	(μ A) 30	C	
Max. mean Cathode Current	(mA) 1		
Operating time	(μ Sec) 50		
Max. Extinction time	(μ Sec) 800	D	
Target life 5,000 hours integrated burning time at 1mA maximum mean cathode current			
<u>Notes</u>			
A. with anode disconnected and cathode current of 100 μ A			
B. with 1mA cathode current			
C. with 140V between anode and cathode			
D. Time from 1 mA cathode current			

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

	Test Conditions	Tests	Limits		No. tested	Note
			Min.	Max.		
a	A D.C. voltage of 58 volts shall be applied between trigger and cathode through a resistance of 470 k Ω with trigger positive and a supply voltage of 175 volts D.C. shall be connected to the anode, through a resistance of 68 k Ω . The tube shall not strike. The trigger voltage shall then be increased gradually to 74 volts and the tube shall strike.	Control gap striking voltage (V)	62	74	100%	
b	With a supply voltage of 175 volts D.C. connected to the anode through a resistance of 68 k Ω , the trigger voltage is increased until breakdown in the main gap occurs. The main gap current shall then be adjusted to 1mA.	Main gap maintaining voltage (V)	68	78	100%	
c	A D.C. supply voltage of 175 volts shall be connected to the anode through a resistance of 68 k Ω . The tube shall strike, when a single flat topped pulse is applied to the trigger electrode with a duration not less than 75 μ S. Rise time of the trigger pulse shall be between 5 and 10 μ S.	Dynamic transfer sensitivity (V)		98	100%	

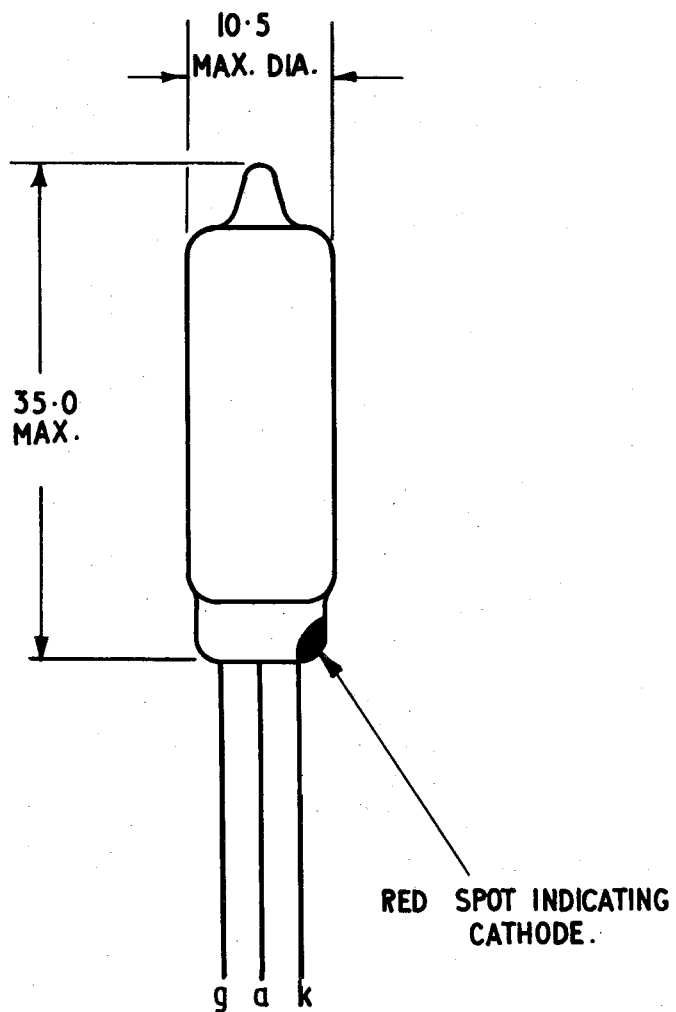
Tests

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To be performed in addition to those applicable in K1001

	Test Conditions	Test	Limits		No. tested	Note
			Min.	Max.		
d	A D.C. supply voltage of 140 volts is connected to the anode through a resistance of 68 k Ω . A D.C. voltage connected to the trigger through a resistance of 1.0 M Ω shall be increased until breakdown and the transfer to the main gap occurs. The anode supply shall then be disconnected and the current to the trigger circuit measured.	Transfer Current (μ A)	-	30	100%	
e	A D.C. supply of 175 volts is connected to the anode through a resistance of 68 k Ω . With the trigger connected to the cathode through a resistance of 470k Ω the main gap shall be struck and the main gap current adjusted to 1mA. A single square top voltage pulse having a negative amplitude of 130 volts and a length of 1000 μ S shall be applied to the anode. The tube shall extinguish	Extinction time (μ Secs)	-	800	100%	

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ALL DIMENSIONS
IN MILLIMETRES.

SPACING OF LEADS 1.5 MIN.

THE LEADS SHALL BE TINNED FLEXIBLE 27-29 SWG.
WIRES AT LEAST 26mm. IN LENGTH.

CV 2486/1/4