MINISTRY OF SUPPLY - D.L.R.D.(A)/R.A.E.

VALVE ELECTRONIC **CV413**

Specification M06A/CV.413
Issue 3 Dated 29.5.1953
To be read in conjunction with K.1001
excluding clauses: 5.2; 5.8

SECURITY	
Specification	Valve
UNCLASSIFIED	UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE - Gas-filled Relay

CATHODE - Cold

ENVELOPE - Glass unmetallised

PROTOTYPE - G150/2D

MARKING
See K.1001/4

BASE
I.O.

RATINGS

			Note
Control Gap Breakdown Voltage	(V)	70	
Control Gap Maintaining Voltage	(V)	60	B
Main Gap Breakdown Voltage	(V)	150	
Main Gap Maintaining Voltage	(V)	75	B
Transfer Current	(μA)	5	
Max.' Peak Control Electrode Current	(mA)	50	
Max. Average Control Electrode Current over period of 1 second	(mA)	30	

CONNECTIONS

Pin	Electrode	
1	Metal Base Shell	←
2	No connection	
3	Anode	
4	No connection	
5	Control Electrode	
6	Connected to pin 7	←
7	Connected to pin 6	←
8	Cathode	

DIMENSIONS
See K.1001/A1/D1

Dimension	Min.	Max.
A m.m.	-	88
B m.m.	-	33.3

NOTES

A. Valve to be suitable for operation at 50 μA.

B. Gap current = 20 mA.

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

	Test Conditions	Test	Limits Min.	Limits Max.	No. Tested	Note
a	A D.C. voltage not exceeding 55 volts shall be applied between trigger electrode and cathode, positive to trigger with anode floating and increased steadily at a rate not exceeding 25 V. per sec. until the valve strikes.	Control Gap Striking Voltage D.C. (V)	60	80	100%	
b	With conditions as in Test clause 'a', control gap current shall be adjusted to 20 mA.	Control Gap Maintaining Voltage D.C. (V)	—	70	100%	
c	A D.C. voltage not exceeding 100 volts shall be applied between anode and cathode, positive to anode with trigger floating, and increased steadily at a rate not exceeding 25 volts per second until the valve strikes.	Main Gap Breakdown Voltage D.C. (V)	150	—	100%	
d	With conditions as in Test clause 'c', main gap current shall be adjusted to 20 mA.	Main Gap Maintaining Voltage (V)	60	77	100%	
e	With Va = 130V, and with a microammeter in series with R = 2 Megohms connected in series with the trigger electrode, the voltage to this electrode shall be increased steadily until the valve strikes. The current flowing in the trigger/cathode circuit immediately before the valve strikes shall not exceed the value specified.	Transfer Current (μA)	—	10		