



# Miniature Cold-Cathode Voltage-Stabiliser

Code: OB2 (CVI833) ←

This valve is a miniature cold-cathode, gas-filled, voltage-stabiliser for use in industrial and radio equipment where a stable source of voltage is required. It is equivalent to the U.S.A. OB2 type.

## MECHANICAL DATA

Maximum overall length	66.7	mm
Maximum seated height	60.3	mm
Maximum diameter	19.1	mm
Base	B7G	
Net weight	8.5	g
Mounting position		Unrestricted

## CHARACTERISTICS

Maximum striking voltage	127	V←
Minimum applied supply voltage	133	V←
Maximum stabilising voltage at 30 mA	112	V←
Minimum stabilising voltage at 5 mA	105	V←
Nominal stabilising voltage	108	V←
D.C. operating current	5 to 30	mA
Maximum peak current (10 seconds max.)	75	mA
Nominal regulation, 5 to 30 mA	1.5	V←
Maximum regulation, 5 to 30 mA	3.5	V
Nominal drift in stabilising voltage (100 to 1000 hours)	1.4	V←
Temperature coefficient, -20 to +90°C	±5	V←
Ambient temperature range	-55 to +90	°C

NOTE.—With suitable socket connections the internal connection between pins 1 and 5 acts as a switch to open the load circuit when the valve is removed. (See Fig. 1.)

Ref.: G108/1K

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Not less than the quoted minimum supply voltage should be provided to ensure starting during life.

Sufficient resistance must always be kept in series with this type to limit the current to 30 mA under steady state conditions. As stated, during the initial warming up period a maximum current of 75 mA is permissible providing that a period of several minutes duration of operation at normal current follows.

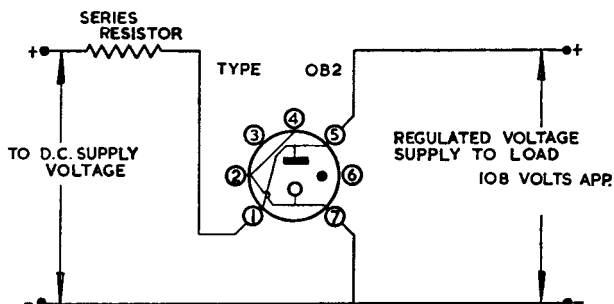
If the associated circuit has a capacitor in shunt with this valve it should be limited to 0.1  $\mu$ F. A larger value may cause oscillation and thus give unstable regulation.

Operation with reversed polarity will damage this valve.



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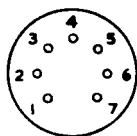
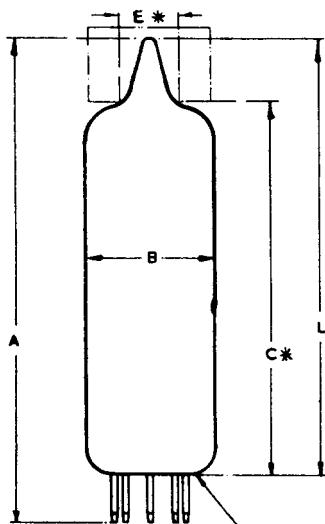


TYPICAL CIRCUIT TO PROVIDE A REGULATED  
SUPPLY VOLTAGE. REMOVAL OF THE VALVE  
FROM THE SOCKET DISCONNECTS THE VOLTAGE  
FROM THE LOAD

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**BASING**

- 1 ANODE
- 2 CATHODE
- 3 INTERNALLY CONNECTED
- 4 CATHODE
- 5 ANODE
- 6 INTERNALLY CONNECTED
- 7 CATHODE

B7G BASE

\*DENOTES:- MEASURED FROM BASE SEAT TO BULB TOP LINE,  
AS DETERMINED BY RING GAUGE OF 'E' INT: DIA

DIM	MILLIMETRES	INCHES
A	63.5 ± 3.2	2½ ± 1/8
B	19.1 MAX	¾ MAX
* C	50.8 ± 2.4	2 ± 3/32
* L	60.3 MAX	2 3/8 MAX
* E	11.1 DIA	7/16 DIA.

NOTE :- BASIC FIGURES ARE INCHES.