



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.

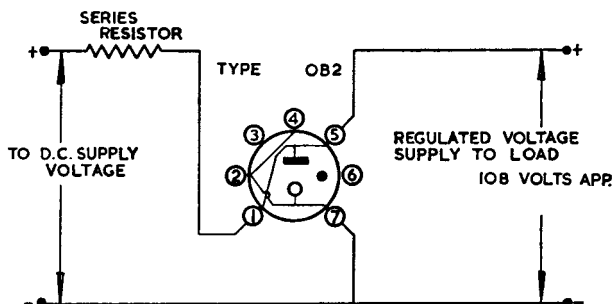
If the associated circuit has a capacitor in shunt with this valve it should be limited to 0.1 μ F. A larger value may cause oscillation and thus give unstable regulation.

Operation with reversed polarity will damage this valve.



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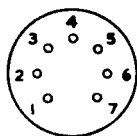
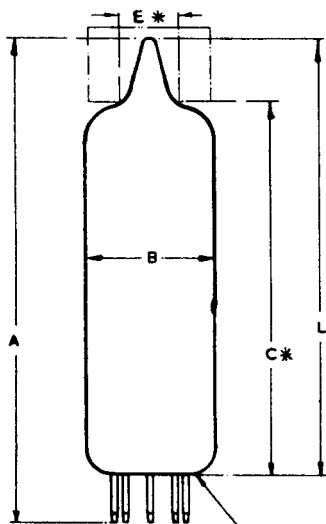


TYPICAL CIRCUIT TO PROVIDE A REGULATED
SUPPLY VOLTAGE. REMOVAL OF THE VALVE
FROM THE SOCKET DISCONNECTS THE VOLTAGE
FROM THE LOAD

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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.