Cold Cathode Gas-Filled Relay

4313C

Double gap cold cathode gas-filled valve for use as a relay or voltage regulator in special circuits.

DIMENSIONS.

Maximum overall length	88	mm.
Maximum overall diameter	30	mm.
Net weight	30	g.

CHARACTERISTICS.

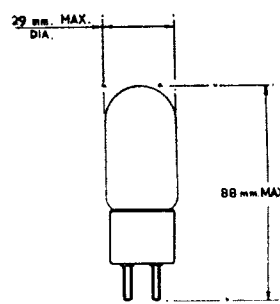
Nominal control gap breakdown voltage	70	V
Nominal control gap maintaining voltage	60	V
Minimum main gap breakdown voltage	150	V
Nominal main gap maintaining voltage	75	V
Transfer current	5	μA (max.)

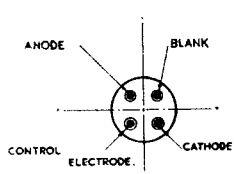
NOMINAL DEIONIZATION TIME.

Main gap	10 milliseconds
Control gap	3 milliseconds

MAXIMUM RATINGS.

Maximum peak control electrode current	30	mA
Maximum average control electrode current (averaged over 1 second)	10	mA
Maximum peak reverse current in main gap	5	mA





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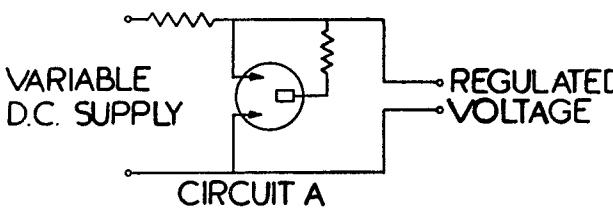
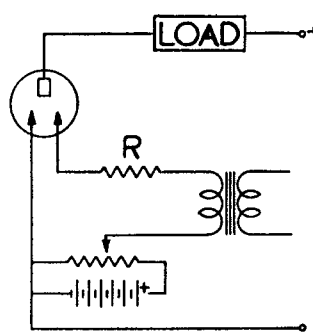
TYPICAL OPERATION.

Circuit A shows a circuit using the control gap of the valve as a voltage regulator.

Circuit B shows a circuit using the valve as a relay. The anode voltage should be intermediate between the main gap breakdown and maintaining voltage. The resistance R in the control circuit should be of the order of 100,000 ohms. This circuit possesses a " lock-in " feature, since the anode potential must be removed momentarily to restore the valve to a non-conducting condition. When supplied from an A.C. source this feature only occurs if the frequency of the supply voltage is such that the deionization time is not exceeded.



CIRCUIT A



CIRCUIT B