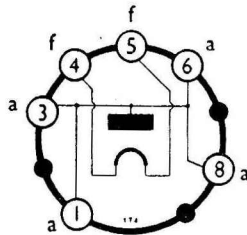


A diode noise generator with a flexible lead Noval base. Suitable for use up to 500 Mc/s.

BASE CONNECTIONS AND VALVE DIMENSIONS



View from underside of base.

Base : B9A/F
Bulb : Tubular
Max. bulb length : 49 mm
Max. diameter : 22 mm
Min. lead length : 35 mm

FILAMENT

V_f (range)	0-6	V
I_f (at $V_f=6V$)	1.15 (approx)	A

The value of the saturated anode current is regulated by variation of the filament voltage.

MAXIMUM RATINGS (Absolute)

V_a	200	V
I_a	85	mA
P_a	3.5	W
V_f	6	V

CAPACITANCES (Measured on a cold unscreened valve)

$C_{a-f(max)}$	3	pF
----------------	---	----

CHARACTERISTICS

V_a	50	V
$I_{a(sat)}$ (approx)	50	mA
V_f (approx)	5.6	V

TYPICAL OPERATION

Noise diode for use up to 220 Mc/s

When measuring receiver noise factor using with the diode a source resistance R_{source} (to match the receiver input) and the technique of setting the value of $I_{a(sat)}$ to double the noise output power from the receiver detector, the range of noise factor that can be measured with a given value of R_{source} is as shown.

Then, noise factor = $10 \log_{10} (I_{a(sat)} \times R_{source})$ db.

No correction of noise factor measured is necessary up to 220 Mc/s.

V_a	50	50	50	V
$I_{a(sat)}$ (range)	0-70	0-70	0-70	mA
V_f (range) (approx)	0-6	0-6	0-6	V
R_{source}	50	70	300	Ω
Noise Factor Measurement (range) (approx)	18.4	19.9	26.2	db

THE GENERAL ELECTRIC CO. LTD. OF ENGLAND

Head Office : Magnet House . Kingsway . London . W.C. 2

AUGUST, 1958

CV2398

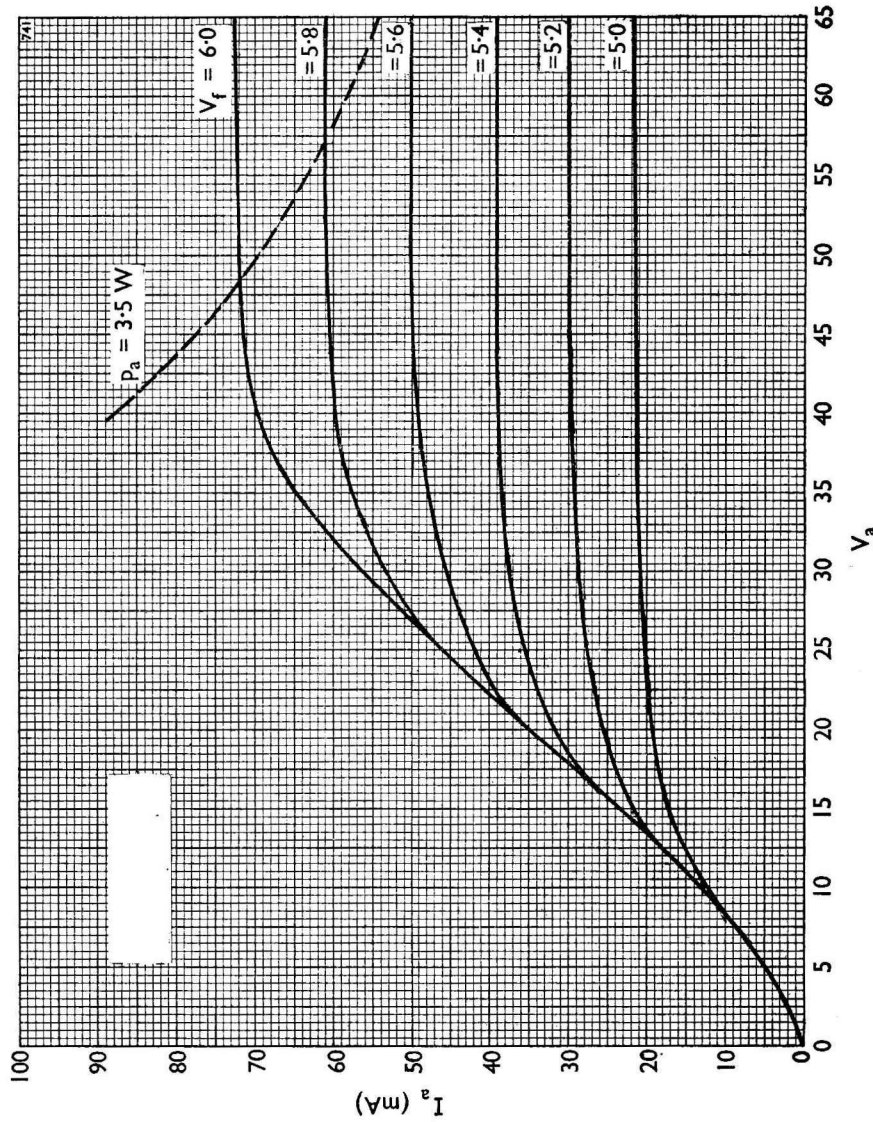
INSTALLATION

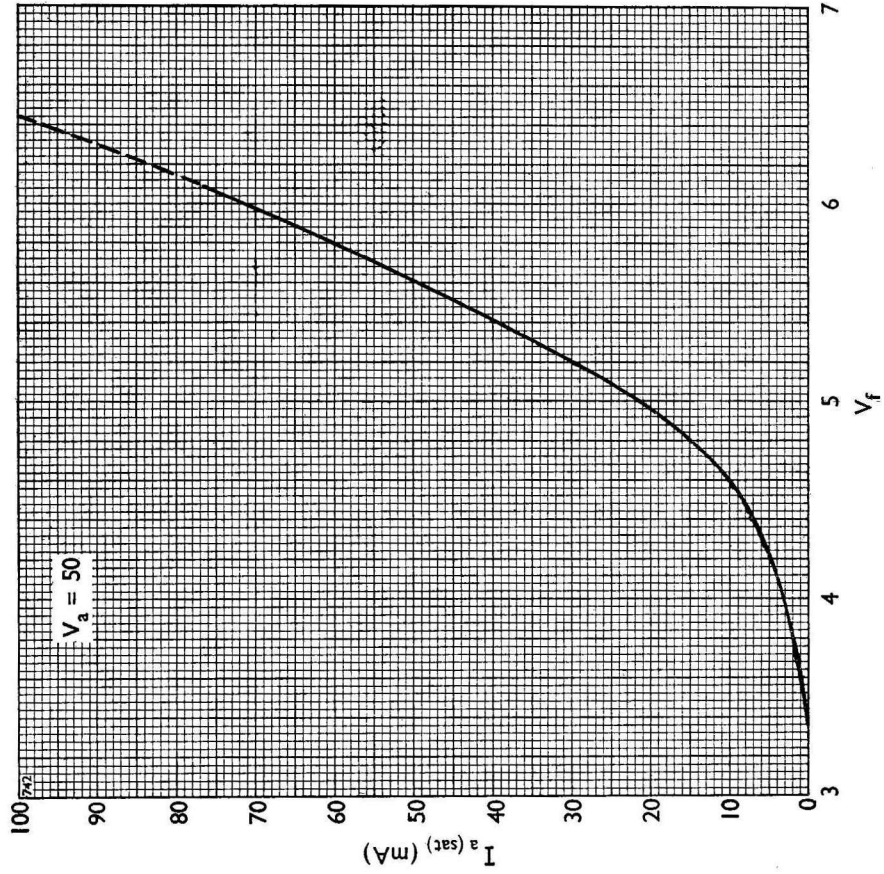
The valve can be mounted in any position.

A screening can, which also serves as a retainer, is necessary.

Free air circulation around the can is preferable. The temperature of the hottest part of the bulb must not exceed 200°C.

Leads should not be soldered or bent less than 3 mm from the base.





CV2398

