

VACUUM GAUGE HEAD , BAYARD-ALPERT TYPE

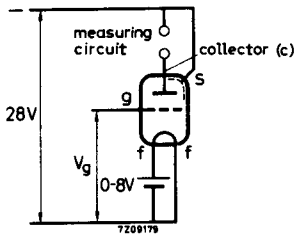
Glass envelope, ultra-high vacuum gauge head of the Bayard-Alpert type. Measuring range 10^{-3} torr to 10^{-10} torr; sensitivity approx. 12 per torr.

The gauge head is provided with two filaments, one of tungsten and one of lanthanum hexaboride.

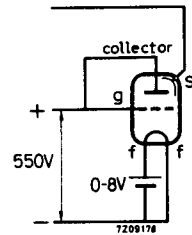
CHARACTERISTICS

Pressure range	10^{-3} to 10^{-10} torr
Sensitivity (for nitrogen)	approx. 12 per torr
Emission current range	$1 \mu\text{A}$ to 75 mA
Filament characteristics	see page 3
Insulation resistance	
collector to other electrodes	min. $10^{14} \Omega$
grid to other electrodes	min. $10^{12} \Omega$

TYPICAL OPERATING CONDITIONS



Measurement



Outgassing

Grid voltage, in combination with fil. 1
in combination with fil. 2

V_g	+145 V
	+178 V

Emission current (see also page 3)

measurement	$100 \mu\text{A}$, 1 mA or 10 mA
outgassing	75 mA

LIMITING VALUES

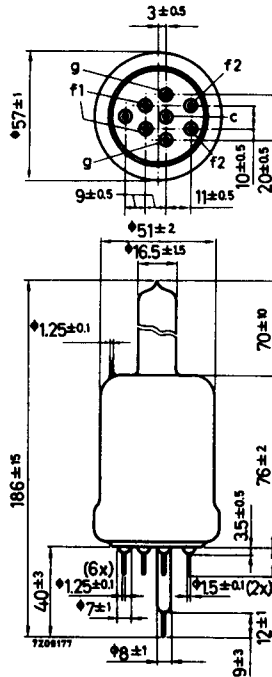
Pressure (filament litt)	max.	10^{-3}	torr
Filament voltage	max.	8	V
Emission current	max.	75	mA
Grid input power	max.	40	W
Bulb temperature during operation	max.	100	°C
Bake-out temperature	max.	450	°C

MECHANICAL DATA

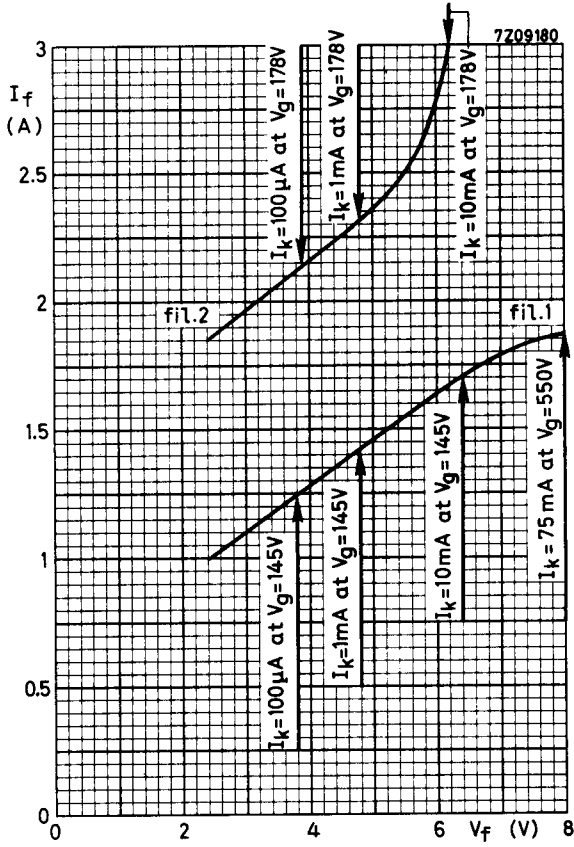
Dimensions in mm

Material

- Tubulation W1 glass
- Filament 1 Tungsten
- Filament 2 Lanthanum hexaboride (La Br 6)



Mounting position: any



PHILIPS

Data handbook



Electronic
components
and materials

IOG17

page	sheet	date
1	1	1968.03
2	2	1968.03
3	3	1968.03
4	FP	2001.05.17