

## ELECTROMETER TUBE

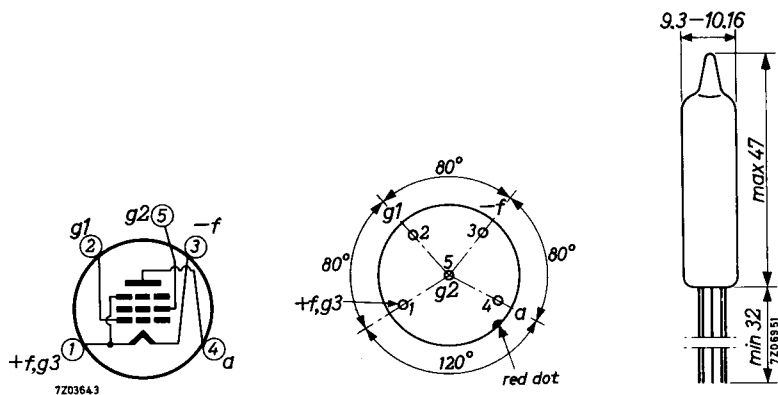
Subminiature electrometerpentode

QUICK REFERENCE DATA		
Filament voltage	$V_f$	1.25 V
Anode voltage	$V_a$	10 V
Anode current	$I_a$	5.0 $\mu$ A
Grid No. 1 current	$-I_{g1}$	$< 8 \times 10^{-15}$ A

## DIMENSIONS AND CONNECTIONS

Dimensions in mm

Base: Sub-miniature



Directly soldered connections to the leads of this tube must be at least 13 mm from the seal and any bending of the leads must be at least 1.5 mm from the seal.

**HEATING:** Direct by D.C.

Filament voltage

 $V_f$  1.25 V

Filament current

 $I_f$  8.2 mA

## CAPACITANCES

Anode to all	$C_a$	4.0 pF
Grid No. 1 to all	$C_{g_1}$	3.0 pF
Anode to grid No. 1	$C_{ag_1}$	0.2 pF

## CHARACTERISTICS AND RANGE VALUES

Anode voltage	$V_a$	10	V
Grid No. 2 voltage	$V_{g_2}$	6.5	5.0 to 7.5 V
Grid No. 1 voltage	$V_{g_1}$	-2.5	V
Anode current	$I_a$	5.0	$\mu A$
Grid No. 2 current	$I_{g_2}$	2.2	1.5 to 3.0 $\mu A$
Grid No. 1 current <sup>1)</sup>	$-I_{g_1}$	$3 \times 10^{-15}$	$< 8 \times 10^{-15}$ A
Transconductance	S	10.5	8.0 to 15 $\mu A/V$
Internal resistance	$R_i$	10.5	$M\Omega$
Amplification factor	$\mu_{ag_1}$	110	$> 80$
Grid No. 1 voltage at crossover point <sup>2)</sup>	$V_{g_1}$	-1.15	V <sup>3)</sup>

## LIMITING VALUES (Absolute max. rating system)

Anode voltage	$V_a$	max.	45 V
Grid No. 2 voltage	$V_{g_2}$	max.	45 V
Cathode current	$I_k$	max.	180 $\mu A$
Filament voltage	$V_f$	max.	1.5 V
		min.	1.1 V

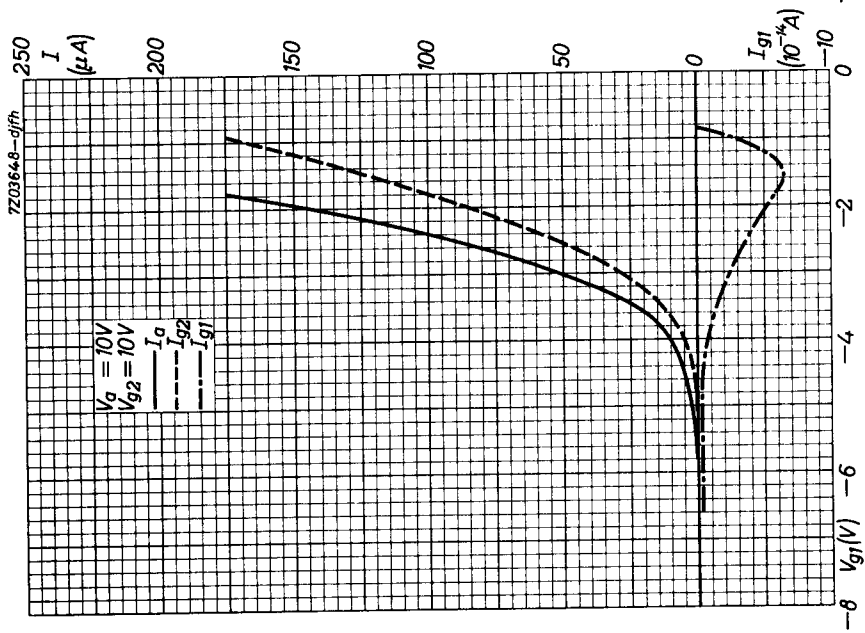
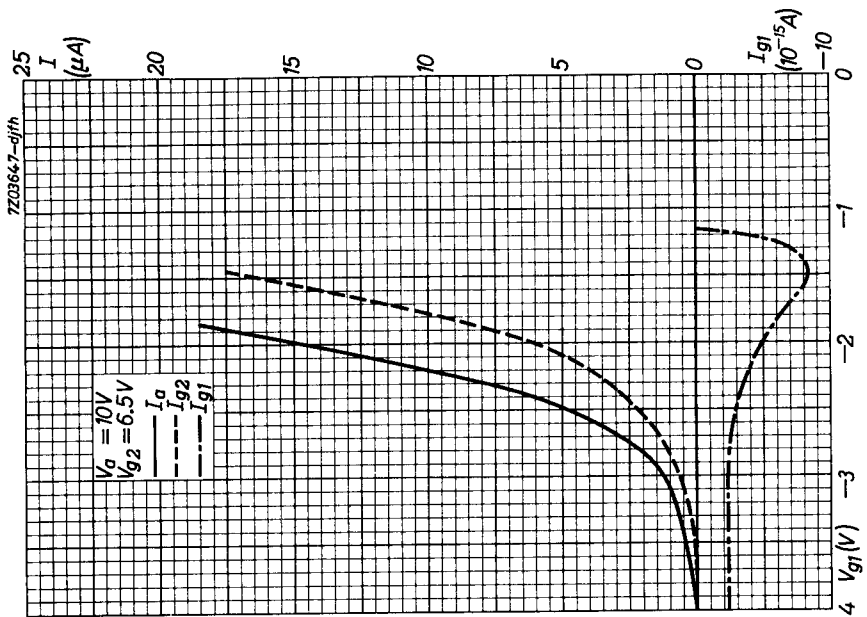
## REMARKS

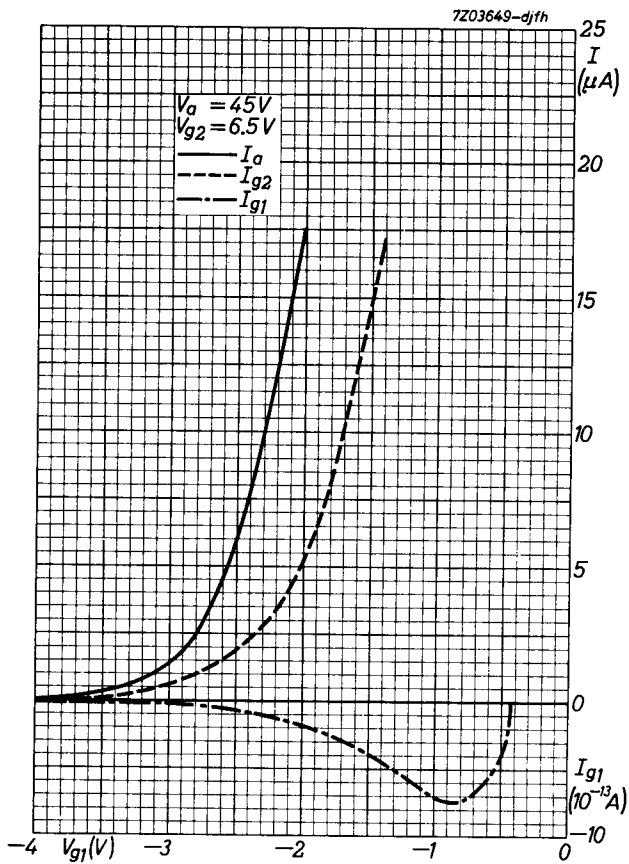
1. In order to avoid excessive drift of the characteristics the filament voltage must be applied before the anode and grid No. 2 voltages.
2. To avoid contamination of the glass, the tube should not be removed from its protective envelope until it is mounted into the equipment.

1) Valid only in darkness.

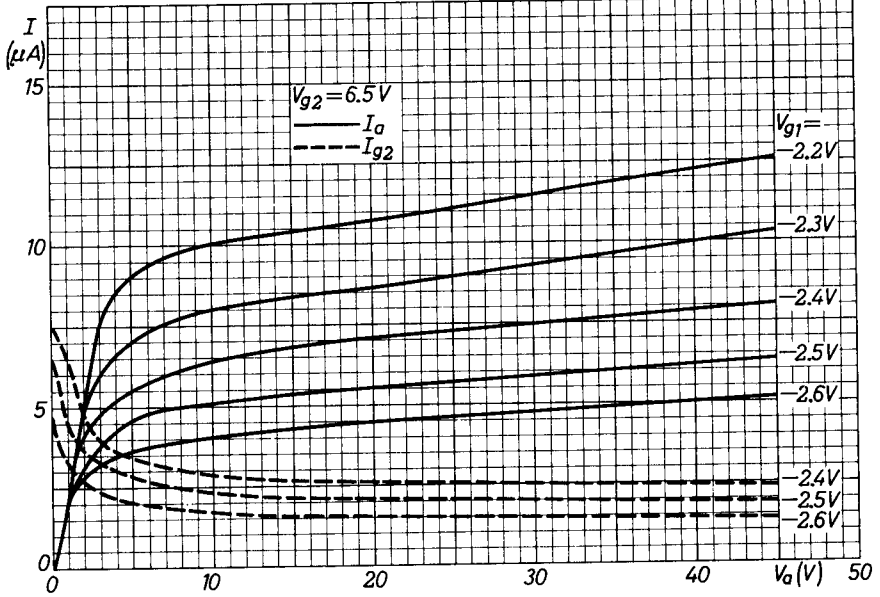
2) The crossover point is the value of  $V_{g_1}$  at which the direction of  $I_{g_1}$  is reversed.

3) Measured at  $V_f = 1.25$  V,  $V_a = 10$  V,  $V_{g_2}$  = the value at which  $I_a = 5 \mu A$  when  $V_{g_1} = -2.5$  V.

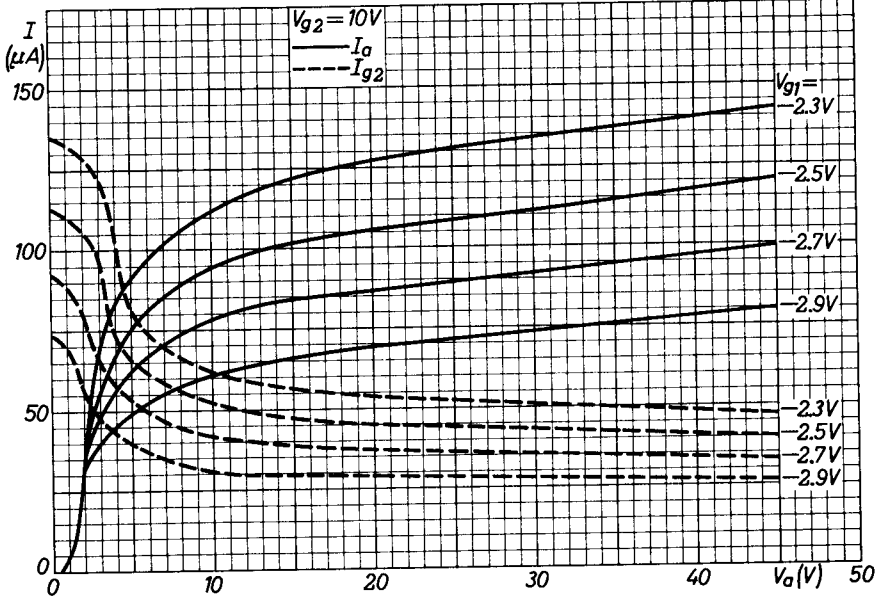




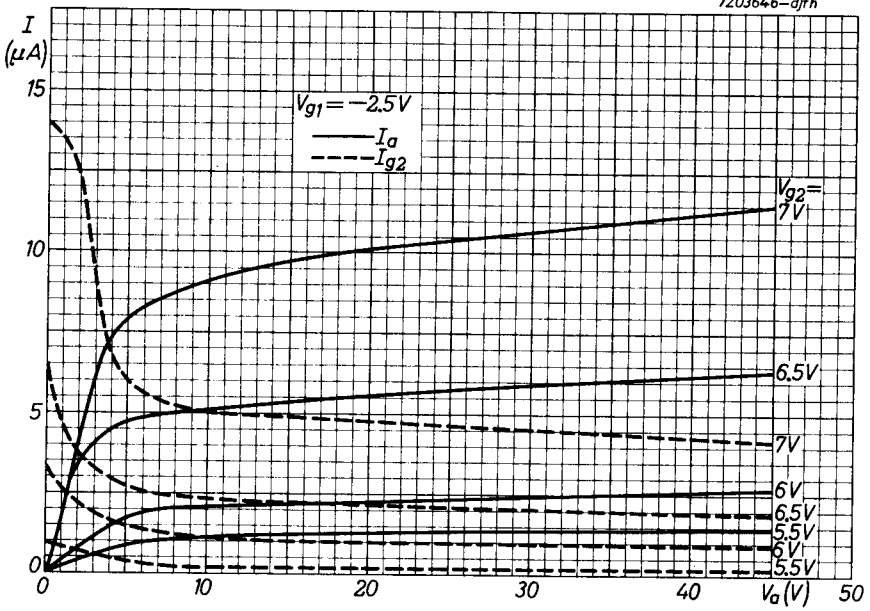
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# PHILIPS

Data handbook



Electronic  
components  
and materials

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