

## ELECTROMETER TUBE

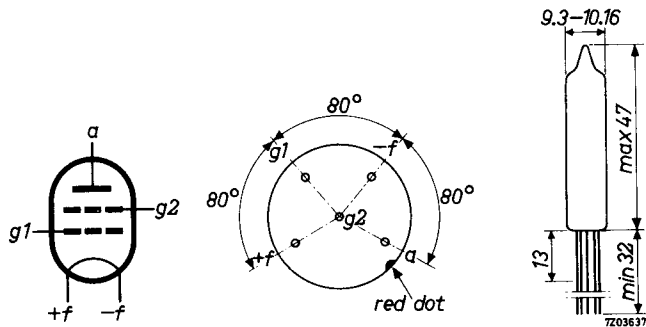
Subminiature electrometer tetrode

QUICK REFERENCE DATA		
Filament voltage	$V_f$	1.25 V
Anode voltage	$V_a$	4.5 V
Grid No. 2 voltage	$V_{g2}$	-3.2 V
Anode current	$I_a$	20 $\mu$ A
Grid No. 2 current	$I_{g2}$	$< 6 \times 10^{-15}$ A

## DIMENSIONS AND CONNECTIONS

Dimensions in mm

Base: Subminiature



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

 $I_f$  13 mA

## CHARACTERISTICS AND RANGE VALUES

Anode voltage	$V_a$	4.5		V
Grid No. 2 voltage	$V_{g2}$	-3.2	-2 to -4.5	V
Grid No. 1 voltage	$V_{g1}$	3.0	2 to 4	V
Anode current	$I_a$	20		$\mu A$
Grid No. 2 current	$-I_{g2}$	$2.5 \times 10^{-15}$	$< 6 \times 10^{-15}$	A
Transconductance	$S_{ag2}$	17	10 to 24	$\mu A/V$
Grid No. 1 current <sup>1)</sup>	$I_{g1}$	250		$\mu A$
Grid No. 2 voltage at crossover point <sup>2)</sup>	$V_{g2}$	-1.75		V

## LIMITING VALUES (Absolute max. rating system)

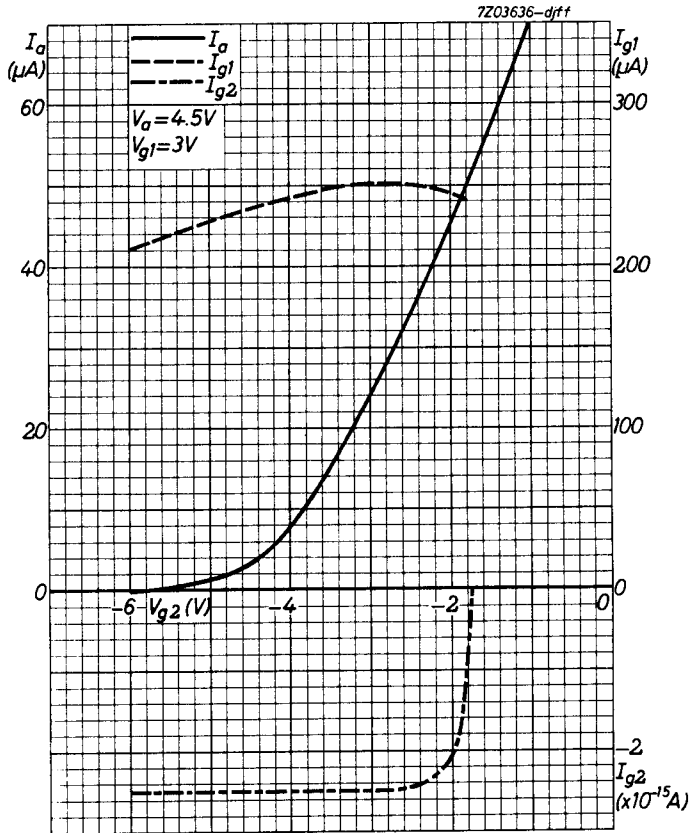
Anode voltage	$V_a$	max.	10	V
Cathode current	$I_k$	max.	300	$\mu A$
Filament voltage	$V_f$	max.	1.5	V
		min.	1.1	V

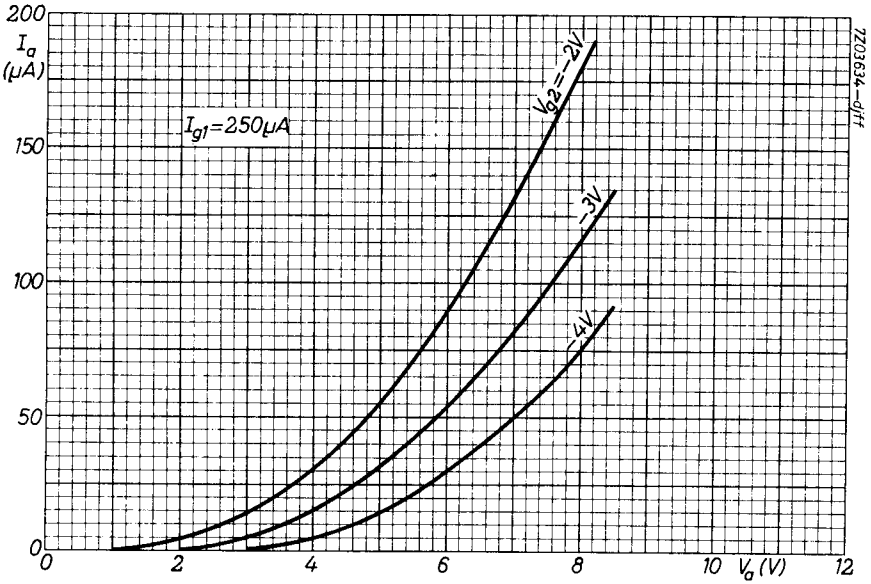
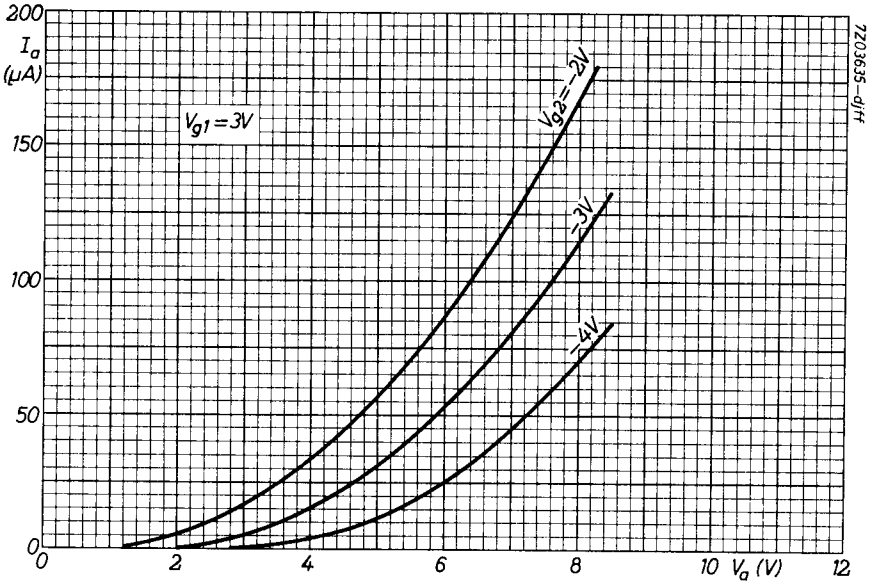
## REMARKS

1. In order to avoid excessive drift of the characteristics the filament voltage must be applied before the anode and grid No. 1 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.

<sup>1)</sup> Only valid in darkness

<sup>2)</sup> "Crossover point" is the point at which the direction of  $I_{g2}$  is reversed  
At this point,  $V_{g2}$  is at least 0.5 V less negative than its value at  $I_a = 20 \mu A$





# PHILIPS

Data handbook



Electronic  
components  
and materials

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