PHILIPS

EC1000

SPECIAL QUALITY TRIODE for use as amplifier tube in probes

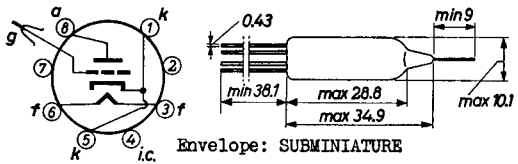
HEATING

Indirect by A.C. or D.C.; parallel supply

Heater voltage V_f = 6.3 V

Heater current I_f = 185 mA

Dimensions in mm



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CAPACITANCES Without external shield

Anode to grid	C_{ag}	= 1.9 pF
Anode to cathode	C_{ak}	= 0.5 pF
Anode to heater	C_{af}	= 0.3 pF
Grid to cathode	C_{gk}	= 3.5 pF
Grid to heater	C_{gf}	= 0.05 pF

LIMITING VALUES (Absolute limits)

Anode voltage in cold condition	V_{a_o}	= max.	275 V
Anode voltage	V_a	= max.	110 V
Anode dissipation	W_a	= max.	1.5 W
Negative grid voltage	$-V_g$	= max.	55 V
External grid resistance	R_g	=	1)
Cathode current	I_k	= max.	22 mA
Voltage between heater and cathode	V_{kf}	= max.	55 V
Bulb temperature	t_{bulb}	= max.	170 °C

1) The grid resistance should be restricted to a value such that no limiting values are exceeded at $-I_g$ = 0.01 µA. For calculating the max. permissible value of Rg the D.C. feedback factor of the operating circuit may be taken into account
In practice the maximum usable R_g value will also be defined by the required current stability and the permissible hum level

TYPICAL CHARACTERISTICS

Heater voltage	V_f	= 6.3 V
Anode voltage	V_a	= 80 V
Anode current	I_a	= 14 mA
Mutual conductance	S	= 14.5 mA/V
Amplification factor	μ	= 24
Heater voltage	V_f	= 6.3 V
Anode voltage	V_a	= 80 V
Grid voltage	V_g	= -2 V
Anode current	I_a	= 14 mA
Input resistance at 250 Mc/s	r_g	= 450 Ω
Input resonance frequency	f_{res}	= 400 Mc/s
Negative grid current after 1000 hours of operation	$-I_g$	< 0.01 μA [1]
Equivalent noise voltage on the grid	V_{gnoise}	< 1 mV [2]
Equivalent microphony voltage on the grid	V_{gmicr}	< 1 mV [3]
Heater voltage	V_f	= 6.3 V
Grid resistor	R_g	= 0.5 MΩ
Cathode resistor at f = 50 c/s	R_k	= 100 Ω
Equivalent hum voltage on the grid	V_{ghum}	< 1 mV [4]

1) End of life value

2) R.M.S. value measured with a straight response filter 0-10000 c/s

3) R.M.S. value measured with an acceleration with a peak value of 4 g at a frequency of 50 c/s

4) R.M.S. value measured with a straight response filter at a heater supply frequency of 50 c/s + 3 % 500 c/s. Heater centre connected to earth

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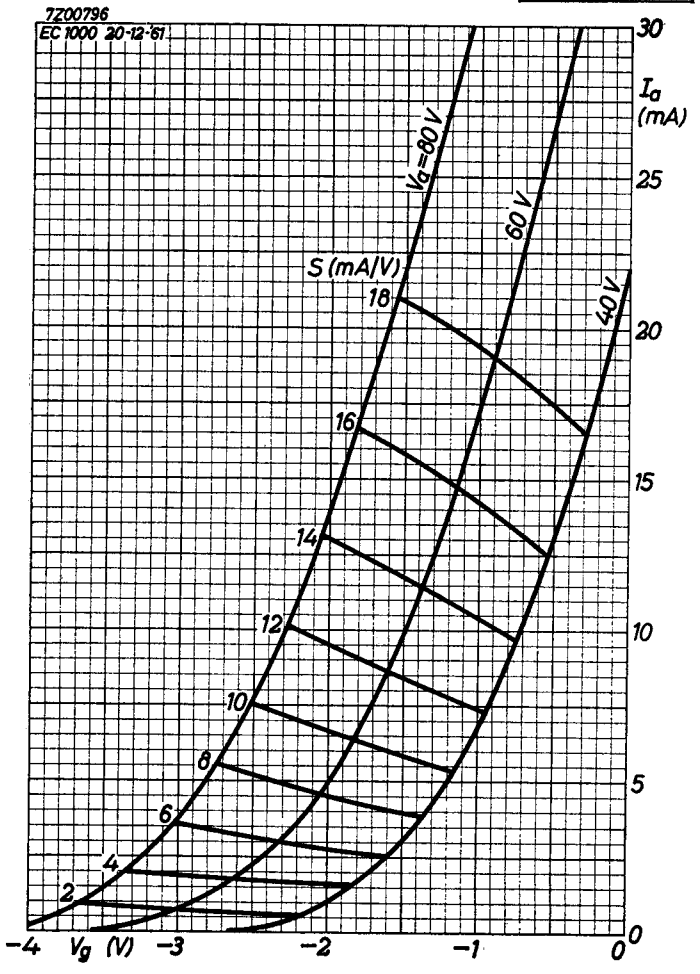

7.7.1962

A

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Electronic Tube

HANDBOOK

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