

SPECIAL QUALITY TRIODE for use as amplifier tube in probes

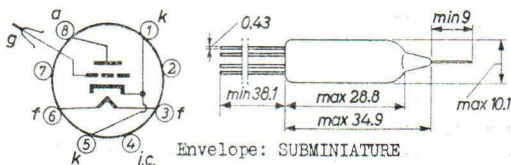
HEATING

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

Heater voltage $V_f = 6.3 \text{ V}$

Heater current $I_f = 185 \text{ mA}$

Dimensions in mm



Envelope: SUBMINIATURE

CAPACITANCES Without external shield

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

LIMITING VALUES (Absolute limits)

Anode voltage in cold condition	$V_{a0} = \text{max. } 275 \text{ V}$
Anode voltage	$V_a = \text{max. } 110 \text{ V}$
Anode dissipation	$W_a = \text{max. } 1.5 \text{ W}$
Negative grid voltage	$-V_g = \text{max. } 55 \text{ V}$
External grid resistance	$R_g = 1)$
Cathode current	$I_k = \text{max. } 22 \text{ mA}$
Voltage between heater and cathode	$V_{kf} = \text{max. } 55 \text{ V}$
Bulb temperature	$t_{\text{bulb}} = \text{max. } 170 \text{ }^\circ\text{C}$

¹⁾ The grid resistance should be restricted to a value such that no limiting values are exceeded at $-I_g = 0.01 \mu\text{A}$. For calculating the max. permissible value of R_g 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_{noise}	< 1 mV ²⁾
Equivalent microphony volt- age on the grid	V_{micr}	< 1 mV ³⁾

Heater voltage	V_f	= 6.3 V
Grid resistor	R_g	= 0.5 M Ω
Cathode resistor at $f = 50$ c/s	R_k	= 100 Ω
Equivalent hum voltage on the grid	V_{hum}	< 1 mV ⁴⁾

¹⁾ End of life value

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

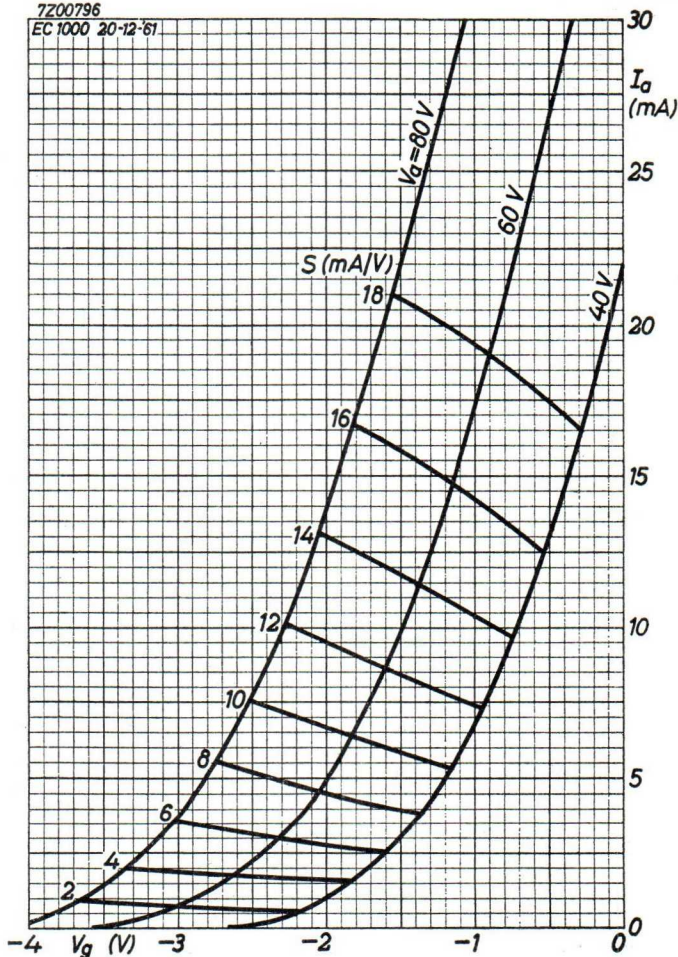
³⁾ R.M.S. value measured with an acceleration with a peak
value of 4 g at a frequency of 50 c/s

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

SQ**PHILIPS****EC1000**

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