PHILIPS

PC88

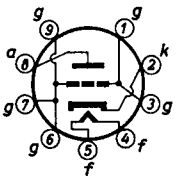
TRIODE for use as grounded grid U.H.F. amplifier in tuners for television bands IV and V

HEATING

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

Heater current I_f = 300 mA
Heater voltage V_f = 3.8 V

Dimensions in mm



Base: NOVAL

CAPACITANCES

Without external screening

Anode to grid	C_{ag}	= 1.2 pF

With external screening (inside diameter 22.2 mm)

Anode to grid	C_{ag}	= 1.7 pF
Grid to heater and cathode	$C_{g(k+f)}$	= 3.8 pF
Anode to heater and cathode	$C_{a(k+f)}$	= 0.055 pF

LIMITING VALUES (Design centre limits)

Anode voltage in cold condition	V_{ao}	= max. 550 V
Anode voltage	V_a	= max. 175 V
Anode dissipation	W_a	= max. 2 W
Cathode current	I_k	= max. 13 mA
Negative grid voltage	$-V_g$	= max. 50 V
External grid resistance (at cathode resistor R_k = 100 Ω)	$R_{g(R_k=100\ \Omega)}$	= max. 1 MΩ
Voltage between heater and cathode	V_{kf}	= max. 100 V[1]

[1]) To fulfil the modulation hum requirements, the A.C. component should not exceed 50 V (R.M.S.)

CHARACTERISTICS

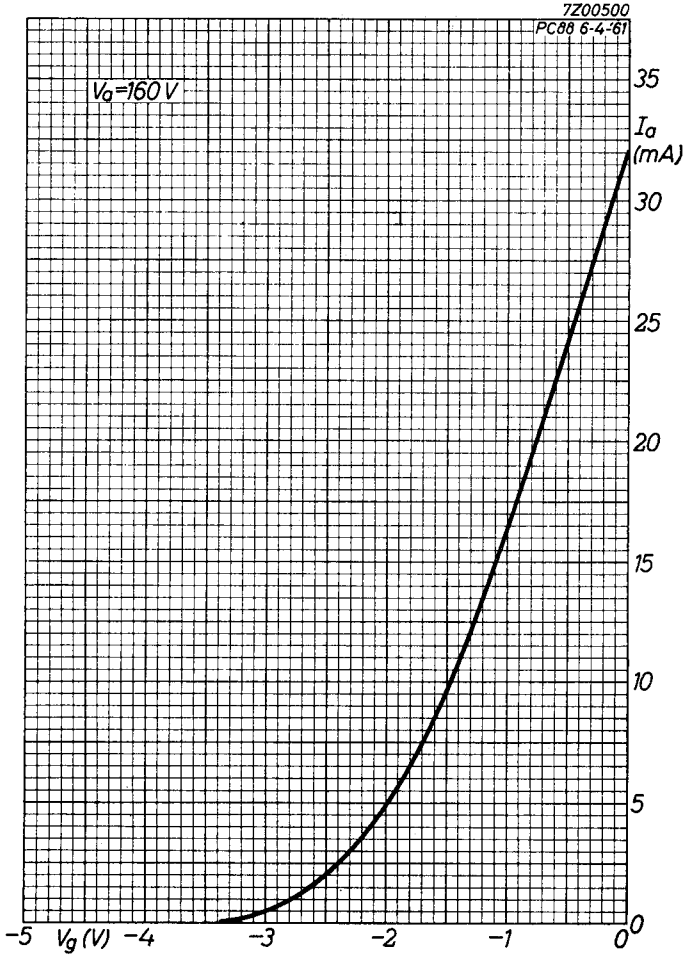
Heater current	I_f	=	300 mA [1]
Anode voltage	V_a	=	160 V [1]
Cathode resistor	R_k	=	100 Ω [1]
Anode current	I_a	=	12.5 mA
Mutual conductance	S	=	13.5 mA/V
Amplification factor	μ	=	65
Equivalent noise resistance	R_{eq}	=	240 Ω
Noise figure	F	=	10 dB
Heater current	I_f	=	300 mA
Anode voltage	V_a	=	0 V
Positive grid current	$+I_g$	=	0.3 μA
Negative grid voltage	$-V_g$	= max.	1.3 V

Series resonance frequencies

Measured between a point on the relevant tube pin close to the tube bottom and a point close to the relevant pin on a metal reference plane, placed against the tube bottom. All the pins, except the relevant one, are connected to the reference plane with a negligible impedance
The tube is screened by a metal cylinder with an inside diameter of 22.2 mm placed upon the metal reference plane

Heater voltage	V_f	=	0 V
Anode voltage	V_a	=	0 V
Anode resonance frequency	f_{o_a}	=	1700 Mc/s
Cathode resonance frequuency	f_{o_k}	=	1000 Mc/s

[1]) Recommended operating conditions


7Z00500
PC88 6-4-61
V_a=160 V
35
I_a
(mA)
30
25
20
15
10
5
0
−5
V_g (V)
−4
−3
−2
−1
0

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Electronic Tube

HANDBOOK

PC88

page	sheet	date
1	1	1962.07.07
2	2	1962.07.07
3	A	1961.04.04
4	B	1961.04.04
5	FP	2000.04.09