SPECIAL QUALITY TRIODE for use as grounded grid aerial amplifier for bands IV and V

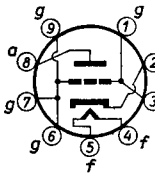
HEATING

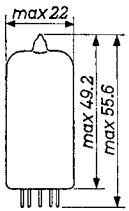
Indirect by A.C. or D.C.; parallel supply

Heater voltage V_f = 6.3 V

Heater current I_f = 155 mA

Dimensions in mm





Base: NOVAL

CAPACITANCES

Without external screening

Anode to grid	C_{ag}	= 1.2 pF

With external screening, connected to the grid; 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 (Absolute limits)

Anode voltage in cold condition	V_{a_o}	= max. 400 V
Anode voltage	V_a	= max. 200 V
Anode dissipation	W_a	= max. 2.4 W
Cathode current	I_k	= max. 15 mA
Negative grid voltage	$-V_g$	= max. 50 V
External grid resistance (with cathode resistor of 100 Ω)	$R_{g(R_k=100\ \Omega)}$	= max. 1 MΩ
Voltage between heater and cathode (cathode positive)	$V_{kf(k\ pos.)}$	= max. 125 V
Voltage between heater and cathode (cathode negative)	$V_{kf(k\ neg.)}$	= max. 60 V

TYPICAL CHARACTERISTICS

Heater voltage	V_f	=	6.3 V
Anode voltage	V_a	=	160 V
Grid voltage	V_g	=	-1.25 V
Anode current	I_a	=	12.5 mA
Mutual conductance	S	=	13.5 mA/V
Amplification factor	μ	=	65
Internal resistance	R_i	=	4.8 kΩ
Equivalent noise resistance	R_{eq}	=	240 Ω
Noise figure at 850 Mc/s	F(f=850 Mc/s)	=	10 dB

Grid current starting point

Heater voltage	V_f	=	6.3 V
Anode voltage	V_a	=	0 V
Positive grid current	$+I_g$	=	0.3 µA
Negative grid voltage	$-V_g$	<	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 frequency	f_{o_k}	=	1000 Mc/s

OPERATING CHARACTERISTICS

Heater voltage	V_f = 6.3 [1]		6.3 V
Anode supply voltage	V_{b_a} = 170 [1]		161 V
Grid supply voltage	V_{b_g} = +9 [1]		0 V
Cathode resistor	R_k = 820 [1]		100 Ω
Anode current	I_a = 12.5		12.5 mA

[1]) Recommended operating conditions

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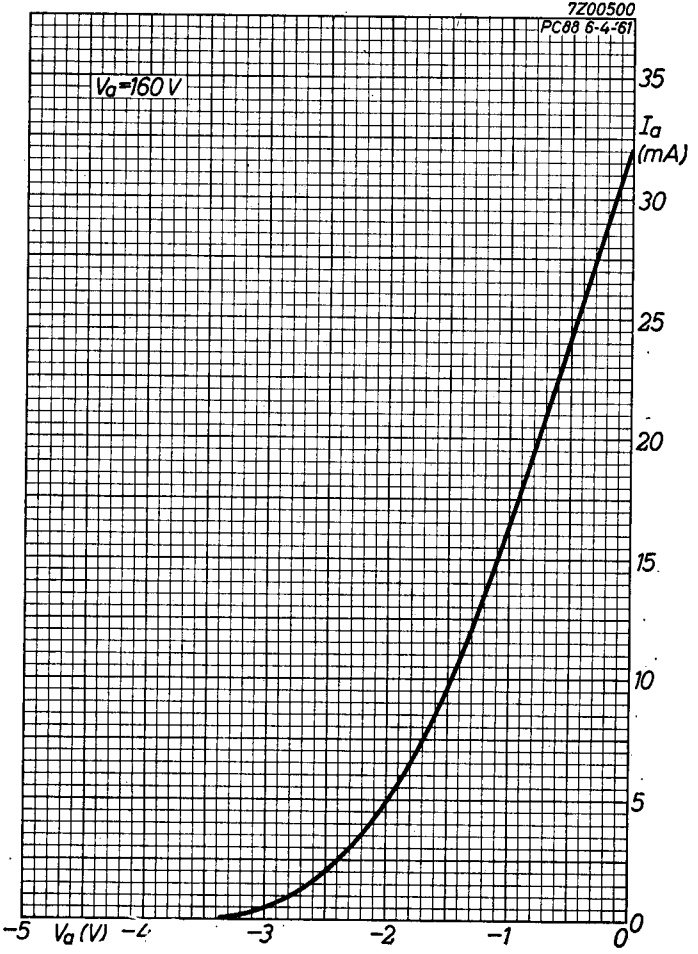

7.7.1962

A

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B

PHILIPS

Electronic Tube

HANDBOOK

E88C

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3	A	1962.07.07
4	B	1962.07.07
5	FP	1999.06.11