

R.F. PENTODE

R.F. pentode with variable transconductance intended for use as wide-band amplifier.

QUICK REFERENCE DATA

Anode current	I_a	10	mA
Transconductance	S	6.0	mA/V
Amplification factor	$\mu_{g_2g_1}$	26	-
Internal resistance	R_i	600	k Ω

HEATING: Indirect by A.C. or D.C.; series or parallel supply

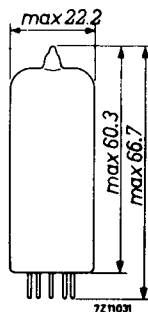
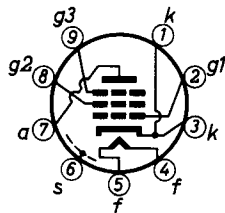
Heater voltage V_f 6.3 V

Heater current I_f 300 mA

DIMENSIONS AND CONNECTIONS

Dimensions in mm

Base: Noval



CAPACITANCES

Anode to all except grid No. 1

$C_a(g_1)$ 3.2 pF

Grid No. 1 to all except anode

$C_{g_1(a)}$ 6.9 pF

Anode to grid No. 1

C_{ag_1} max. 0.007 pF

Grid No. 1 to heater

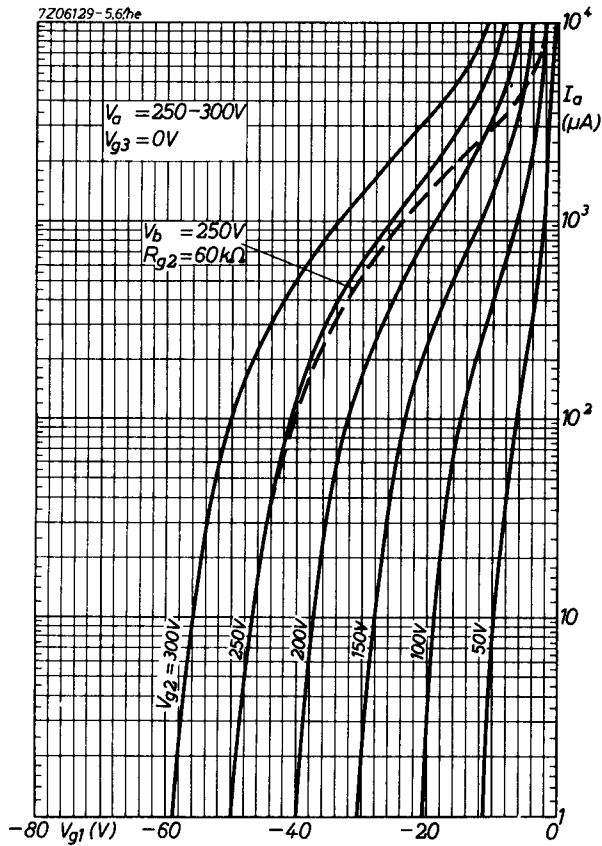
C_{g_1f} max. 0.15 pF

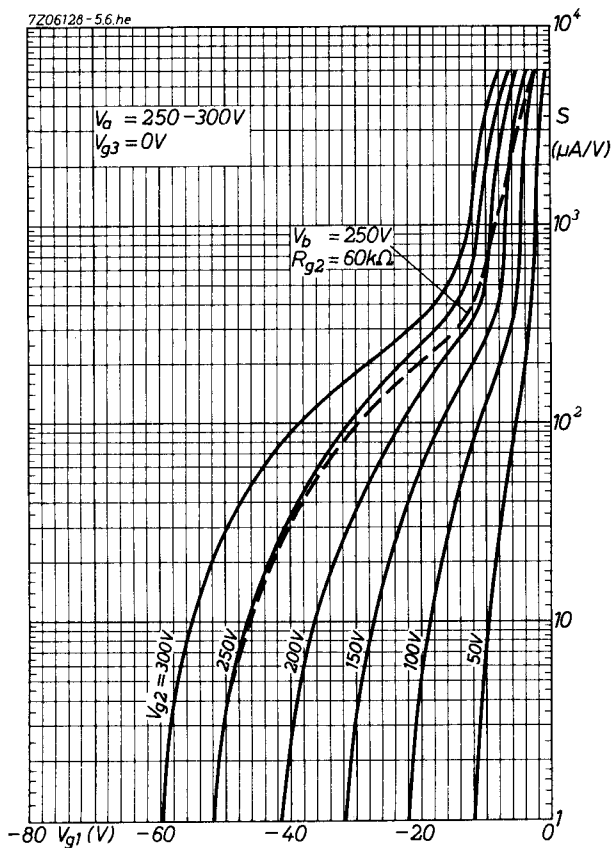
TYPICAL CHARACTERISTICS AND OPERATING CHARACTERISTICS

Anode and supply voltage	$V_a = V_b$	250	V
Grid No.3 voltage	V_{g3}	0	V
Grid No.2 resistor	R_{g2}	60	k Ω
Grid No.1 voltage	V_{g1}	-2 -35	V
Grid No.2 voltage	V_{g2}	100	- V
Anode current	I_a	10	- mA
Grid No.2 current	I_{g2}	2.5	- mA
Transconductance	S	6.0	0.06 mA/V
Internal resistance	R_i	0.6	>5 M Ω
Amplification factor	μ_{g2g1}	26	-
Equivalent noise resistance	R_{eq}	1.4	- k Ω
Grid No.1 input resistance, f = 50 MHz	r_{g1}	9	- k Ω

LIMITING VALUES (Design centre rating system)

Anode voltage	V_{a0}	max. 550	V
	V_a	max. 250	V
Anode dissipation	W_a	max. 2.5	W
Grid No.2 voltage	V_{g20}	max. 550	V
	V_{g2}	max. 250	V
Grid No.2 dissipation	W_{g2}	max. 0.65	W
Grid No.1 resistor	R_{g1}	max. 3	M Ω
Cathode current	I_k	max. 15	mA
Heater to cathode voltage	V_{kf}	max. 150	V





PHILIPS

Data handbook



**Electronic
components
and materials**

EF85

page	sheet	date
1	1	1969.12
2	2	1969.01
3	3	1969.01
4	4	1969.01
5	FP	1999.08.16