R.F. DOUBLE TRIODE

Double triode intended for use as cascode amplifier in television tuners.

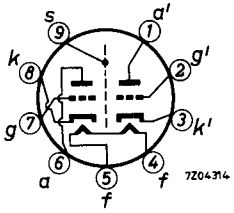
QUICK REFERENCE DATA (Each unit)			
Anode current	I_a	15	mA
Transconductance	S	12.5	mA/V
Amplification factor	μ	33	-

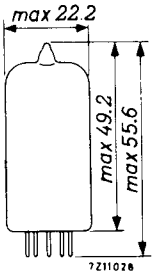
HEATING: Indirect by A.C. or D.C.; series supply

Heater current	I_f	300	mA
Heater voltage	V_f	7.6	V

DIMENSIONS AND CONNECTIONS Dimensions in mm

Base: Noval





CAPACITANCES

		without external screen	with external screen	
Anode to grid	C_{ag}	1.4	1.4	pF
Grid to cathode + heater + screen	$C_{g/kfs}$	3.3	3.3	pF
Anode to cathode + heater + screen	$C_{a/kfs}$	1.8	2.5	pF
Grid to heater	C_{gf}	0.13	0.13	pF
Anode to grid	$C_{a'g'}$	1.4	1.4	pF
Cathode to grid + heater + screen	$C_{k'/g'fs}$	6	6	pF
Anode to grid + heater + screen	$C_{a'/g'fs}$	2.8	3.7	pF
Cathode to heater	$C_{k'f}$	2.7	2.7	pF
Anode to cathode	$C_{a'k'}$	0.18	0.16	pF
Anode to anode	$C_{aa'}$	max. 0.045	max. 0.015	pF
Grid to anode other unit	$C_{ga'}$	max. 0.005	max. 0.005	pF

REMARK

The unit a, g, k should be used as the grounded cathode input section and unit a', g', k' as the grounded grid output unit.

TYPICAL CHARACTERISTICS

Anode voltage	V_a	90	V
Grid voltage	V_g	-1.3	V
Anode current	I_a	15	mA
Transconductance	S	12.5	mA/V
Amplification factor	μ	33	-
Equivalent noise resistance	R_{eq}	300	Ω

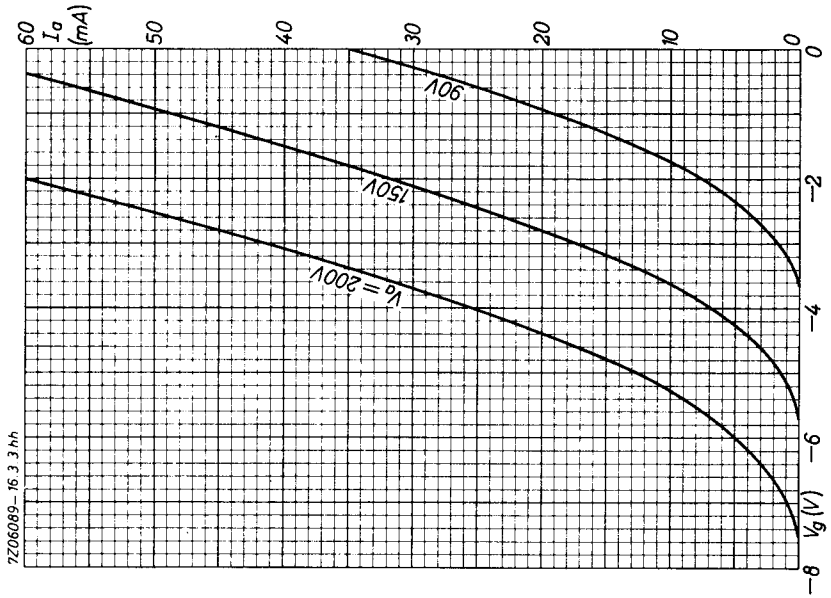
LIMITING VALUES (Design centre rating system) (each unit, unless otherwise stated)

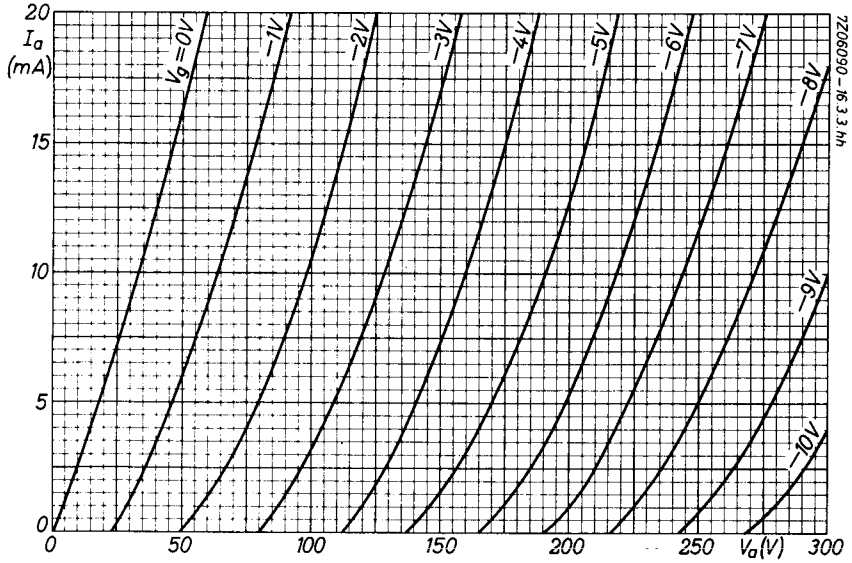
Anode voltage	V_{a_o}	max.	550	V
	V_a	max.	130	V
Anode dissipation	W_a	max.	1.8	W
Cathode current	I_k	max.	25	mA
Grid voltage	$-V_g$	max.	50	V
Grid resistor	R_g	max.	1	MΩ
Cathode to heater voltage	V_{kf}	max.	50	V
	$V_{k'f(k'pos)}$	max.	150	V [1])

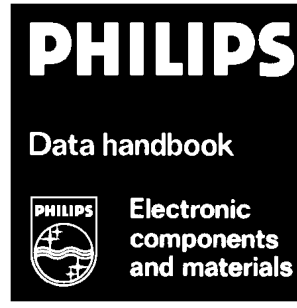
REMARK

In order not to exceed the maximum permissible anode voltage when the cascode amplifier is controlled, it is necessary to use a voltage divider for the grid of the grounded grid section. With grid current biasing for the grounded cathode section the anode voltage across this section should not be more than 75 V in the not controlled condition.

[1]) D.C. component max. 130 V.


60
I_a (mA)
50
40
30
20
10
0
0
−2
−4
−6
−8
V_g (V)
90V
150V
V_a = 200V
7Z06089-16.3.3 hh


20
I_a (mA)
15
10
5
0
0
50
100
150
200
250
V_a(V)
300
V_g=0V
−1V
−2V
−3V
−4V
−5V
−6V
−7V
−8V
−9V
−10V
7Z06090-16.3.3 hh



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