BOOSTER DIODE

Booster diode intended for use in line time-base circuits of transformerless television receivers.

QUICK REFERENCE DATA				
Anode current, peak	I_{ap}	max.	450	mA
Anode voltage, peak	V_{ap}	max.	5000	V
Cathode to heater voltage, peak	V_{kfp}	max.	5000	V

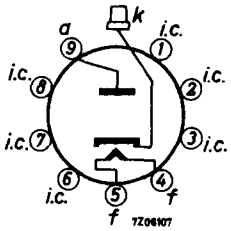
HEATING: Indirect by A.C. or D.C.; series supply

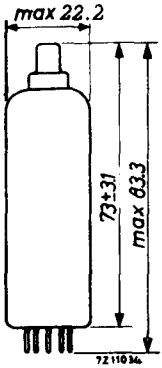
Heater current	I_f	300	mA
Heater voltage	V_f	17	V

DIMENSIONS AND CONNECTIONS Dimensions in mm

Base: Noval

Top cap: Type 1





CAPACITANCES

Anode to all	C_a	6.4	pF
Cathode to heater	C_{kf}	2.8	pF

LIMITING VALUES (Design centre rating system, unless otherwise specified)

Supply voltage	V_{b_o}	max.	550	V
	V_b	max.	250	V
Anode dissipation	W_a	max.	3.5	W
Anode current, average	I_a	max	150	mA
peak	I_{a_p}	max.	450	mA
Anode voltage, peak	V_{a_p}	max	5000	V [1][2]
Absolute max.	V_{a_p}	max.	5600	V [1][2]
Cathode to heater voltage, peak	V_{kf_p}	max.	5000	V [1]
Series resistance heater chain	R_s	min.	80	Ω [3]
Heater to earth voltage	$V_{f/earth}$	max.	220	V_{RMS}

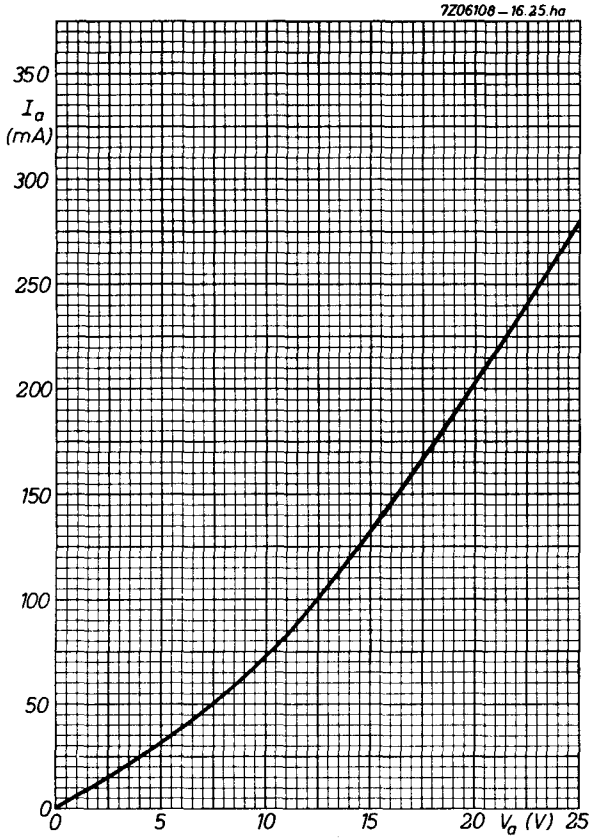
REMARK

In general it will be necessary to take measures in order to prevent the maximum permissible screen grid dissipation of the tube that derive their anode voltage from this booster diode, from being exceeded during the heating-up time of the booster diode.

[1]) Max. pulse duration 22% of a cycle with a maximum of 18 μsec.

[2]) Cathode positive with respect to the anode.

[3]) R_S = minimum resistance of the heater chain between any heater pin and any mains terminal under working conditions (the heater of another tube can be used for this resistance).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350
I_a
(mA)
300
250
200
150
100
50
0
0
5
10
15
20
V_a (V)
25

PHILIPS

Data handbook

Electronic components and materials

PY81

page	sheet	date
1	1	1969.12
2	2	1969.01
3	3	1969.01
4	FP	1999.08.03