

BOOSTER DIODE

Booster diode for timebase circuits of colour television receivers. The PY500A is unilaterally interchangeable with the PY500 in existing circuits. In new equipment designs the $300\ \Omega$ protection resistance between pins 3 and 5 can be deleted for the PY500A.

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

Heater current

I_f 300 mA

Heater voltage

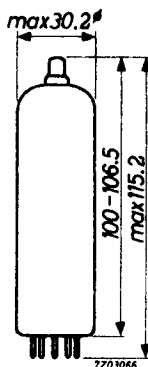
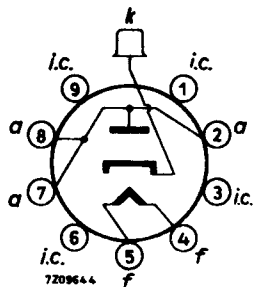
V_f 42 V

MECHANICAL DATA

Dimensions in mm

Base: Magnoval

Cap: Type 1



CAPACITANCES

Anode to cathode

C_{ak} 12.5 pF

Cathode to heater

C_{kf} 3.1 pF ←

TYPICAL CHARACTERISTICS

Internal resistance ($I_a = 440 \text{ mA}$)	R_i	45.5 Ω
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LIMITING VALUES (Design centre rating system)

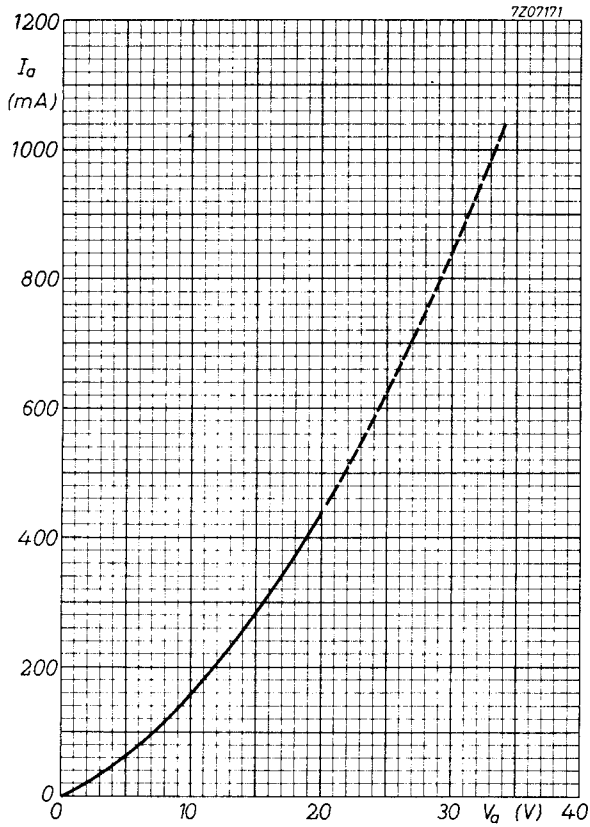
Anode dissipation	W_a	max. 11 W
Anode current, average	I_a	max. 440 mA
peak	I_{ap}	max. 1000 mA
Anode voltage, negative peak	$-V_{ap}$	max. 5600 V ¹⁾
negative peak (absolute max.)	$-V_{ap}$	max. 7000 V ¹⁾
Cathode to heater voltage, peak	V_{kfp}	max. 6300 V ¹⁾

Series resistance heater chain

During operation, the external resistance between either heater pin of the PY500A and either mains terminal should be at least 100 Ω when $V_f/\text{earth} = 220 \text{ V}_{\text{RMS}}$
50 Ω when $V_f/\text{earth} = 110 \text{ V}_{\text{RMS}}$

The hot heater resistances of other tubes in the heater chain can serve for this purpose.

¹⁾ Max. pulse duration 22% of a cycle, but max. 18 μs .



PHILIPS

Data handbook



**Electronic
components
and materials**

PY500A

page	sheet	date
1	1	1970.08
2	2	1970.08
3	3	1970.08
4	FP	1999.02.24