

SHUNT STABILISER TRIODE

PD500

High voltage triode for use as a shunt stabiliser in colour television receivers.

HEATER

Suitable for series operation, a.c. or d.c.

I_h	300	mA
V_h	7.3	V

CHARACTERISTICS

V_a	25	kV
V_s	0	V
$-V_g$ at $I_a = 1.5\text{mA}$	7 to 30	V
$-V_g$ max. at $I_a = 0.1\text{mA}$	40	V
ΔV_g max. between $I_a = 0.1\text{mA}$ and $I_a = 1.5\text{mA}$	10	V

RATINGS (DESIGN CENTRE SYSTEM)

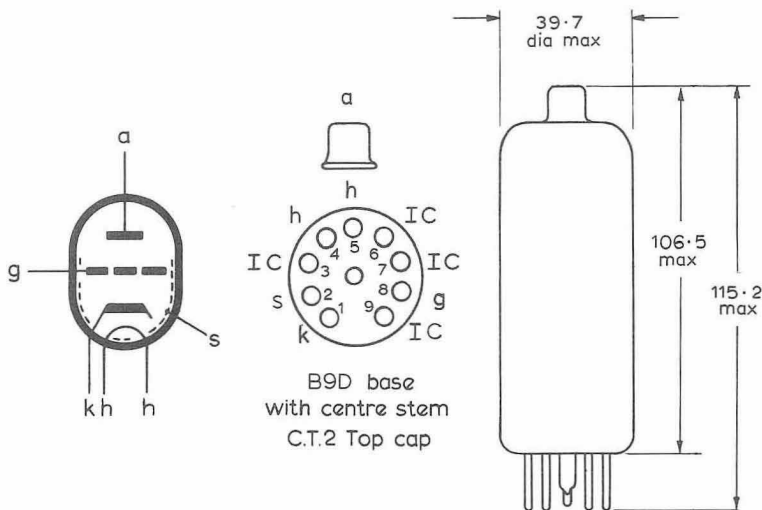
V_a max.	25	kV
V_a (absolute max. see note 1)	27.5	kV
$-V_g$ max. (see note 2)	150	V
p_a	30	W
p_a max. (intermittent rating t.v. shunt stabiliser - see note 3)	40	W
I_a max.	1.6	mA $\leftarrow$
R_{g-k} max.	5.0	M Ω
V_{h-k} max. (cathode positive)	400V d.c.+250V a.c.	
V_{h-k} max. (cathode negative)	250	V
V_{s-k} max. (shield negative - see note 4)	400	V
$T_{\text{anode seal}}$ (absolute max.)	200	$^{\circ}\text{C}$

NOTES

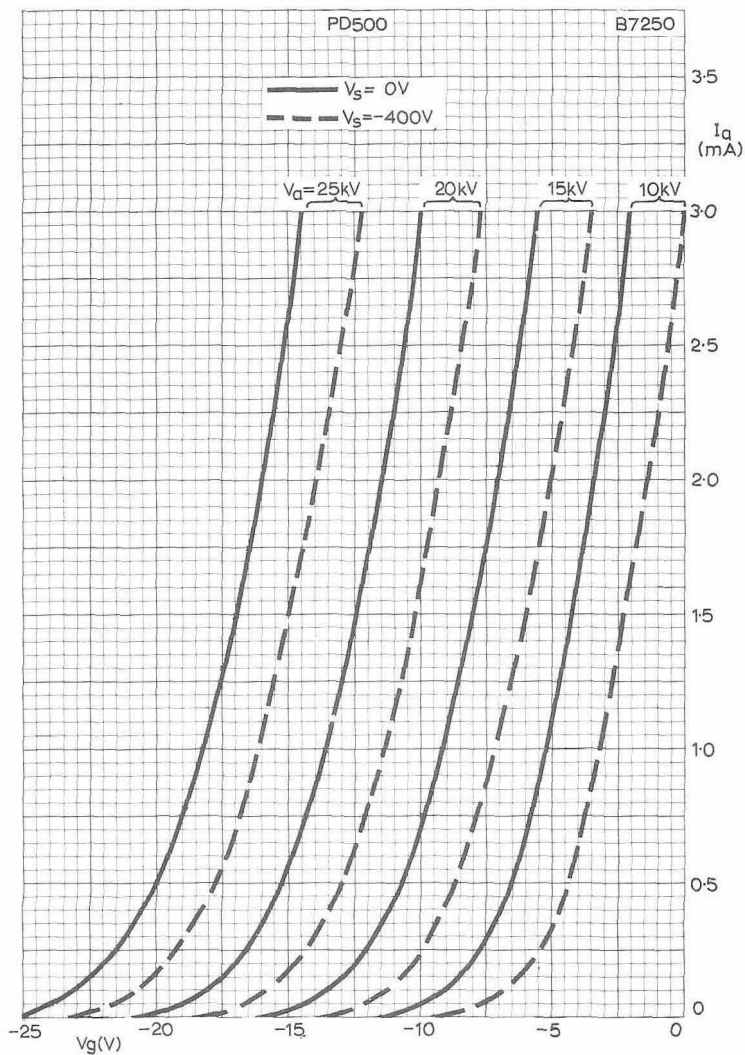
1. If due to a circuit failure the anode current becomes zero, the anode voltage should never exceed 45kV (abs. max.).
2. During equipment warm-up period and for brief intervals during equipment adjustment only, the grid voltage may rise to 440V maximum.
3. This rating applies to operation for a maximum of 10% of the time.
4. Operation with the shield positive with respect to cathode is not recommended. The shield may function as a spark trap and should have a low impedance return path to the external coating of the picture tube. A.C. potential between the shield and cathode can modulate the anode current; the maximum sensitivity is $2.5\mu\text{A/V}$.
5. Additional support is required at the top of the valve. To prevent corona effects, any metal screening around the valve should be at least 50mm from the nearest point of the bulb. Adequate ventilation should be provided for.

X-RAYS

When operated in a television receiver this valve will produce X-radiation in excess of permissible dosage, and a suitable screen should be incorporated.



All dimensions in mm



ANODE CURRENT PLOTTED AGAINST GRID VOLTAGE
WITH ANODE VOLTAGE AS PARAMETER

