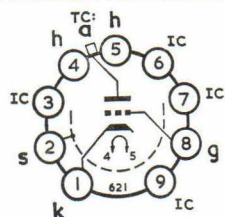


SHUNT STABILISER TRIODE



B9D Base with centre stem
CT2 Cap

GENERAL

This high voltage triode is for use as a shunt stabiliser in colour television receivers having series connected heaters (a.c. or d.c.).

Heater Current	I_h 0.3	A
Heater Voltage	V_h 7.3	V

DESIGN CENTRE RATINGS

Maximum Anode Dissipation	$P_a(\text{max})$	30*	W
Maximum Anode Voltage	$V_a(\text{max})$	25†	kV
Maximum Negative Grid Voltage	$-V_g(\text{max})$	150‡	V
Maximum Heater to Cathode Voltage	$V_{h-k}(\text{max})$	400V d.c. + 250V a.c.	
Heater Negative		250	V
Heater Positive			
Maximum Shield to Cathode Voltage	$V_{s-k}(\text{max})$	0	V
Shield Positive		400§	V
Shield Negative			
Maximum Anode Current	$I_a(\text{max})$	1.6	mA
Maximum Grid to Cathode Resistance	$R_{g-k}(\text{max})$	5.0	MΩ
Maximum Anode Seal Temperature (absolute)	$T_{\text{anode seal}}$	200	°C

* The absolute rating of 40W is permissible only during short periods—in total up to a maximum of 10% of the operation time of the valve.

† The absolute rating is 27.5kV. If due to a circuit failure the anode current becomes 0mA the anode voltage should never exceed 45kV (absolute).

‡ During equipment warm-up period and for brief intervals during equipment adjustment only, this voltage may increase to 440V max.

§ The shield connected to pin 2 is provided in order to shield grid and cathode from the high anode voltage. It should be connected directly to earth with a minimum lead inductance. A.C. potential between the shield and cathode can modulate the anode current; the maximum sensitivity is 2.5μA/V.

MOUNTING

Additional supporting of the valve at the top is required. To prevent corona effects any metal screening applied around the valve should be at least 5 cm from the nearest point of the bulb. Adequate ventilation should be provided.

CHARACTERISTICS

Anode Voltage	V_a	25	kV
Shield Voltage	V_s	0	V
Negative Grid Voltage at $I_a = 1.5\text{mA}$	$-V_g$	7 to 30	V
Maximum Negative Grid Voltage at $I_a = 0.1\text{mA}$	$-V_g(\text{max})$	40	V
Maximum Grid Voltage change between $I_a = 0.1\text{mA}$ and $I_a = 1.5\text{mA}$	$\Delta V_g(\text{max})$	10	V

X-RAYS

X-ray shielding may be required to give protection against excessive radiation.

