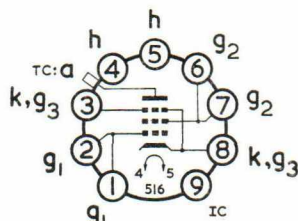


LINE OUTPUT PENTODE



Base B9D, Cap CT1

GENERAL

This output pentode is primarily intended for use in the line timebase of television receivers.

Heater Current	I_h	0.3	A
Heater Voltage	V_h	27	V

RATINGS

Maximum Anode Dissipation	$P_a(\text{max})$	12	W
$P_{g2} \leq 4.0W$		8.0	W
$P_{g2} = 5.0W$			
Maximum Anode and Screen Grid Dissipation	$P(a + g2)\text{max}$	See Rating Chart	
Maximum Screen Grid Dissipation	$P_{g2}(\text{max})$	5.0	W
$P_a \leq 8.0W$		4.0	W
$P_a = 12W$			
Maximum Anode Supply Voltage	$V_{a(b)\text{max}}$	550	V
Maximum Anode Voltage	$V_{a(\text{max})}$	250	V
Maximum Peak Anode Voltage	$V_{a(pk)\text{max}}$	7.0*	kV
Maximum Screen Grid Supply Voltage	$V_{g2(b)\text{max}}$	550	V
Maximum Screen Grid Voltage	$V_{g2(\text{max})}$	250	V
Maximum Heater to Cathode Voltage (R.M.S.)	$V_{h-k(r.m.s.)\text{max}}$	220†	V
Maximum Cathode Current	$I_{k(\text{max})}$	250	mA
Maximum Control Grid to Cathode Resistance	$R_{g1-k(\text{max})}$	500‡	kΩ

* Maximum pulse duration 22% of one cycle with a maximum of 22 μs .

† Measured with respect to the high potential heater pin.

‡ In line timebase applications $R_{g1-k(\text{max})}$ may be 2.2MΩ.

INTER-ELECTRODE CAPACITANCES §

Input	C_{in}	22	pF
Output	C_{out}	9.0	pF
Anode to Grid 1	C_{a-g1}	<1.75	pF
Grid 1 to Heater	C_{g1-h}	<0.2	pF

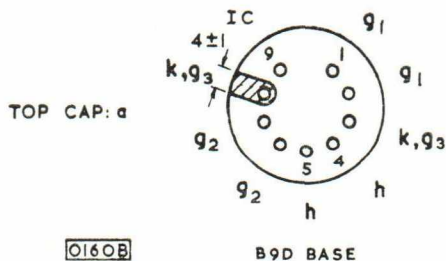
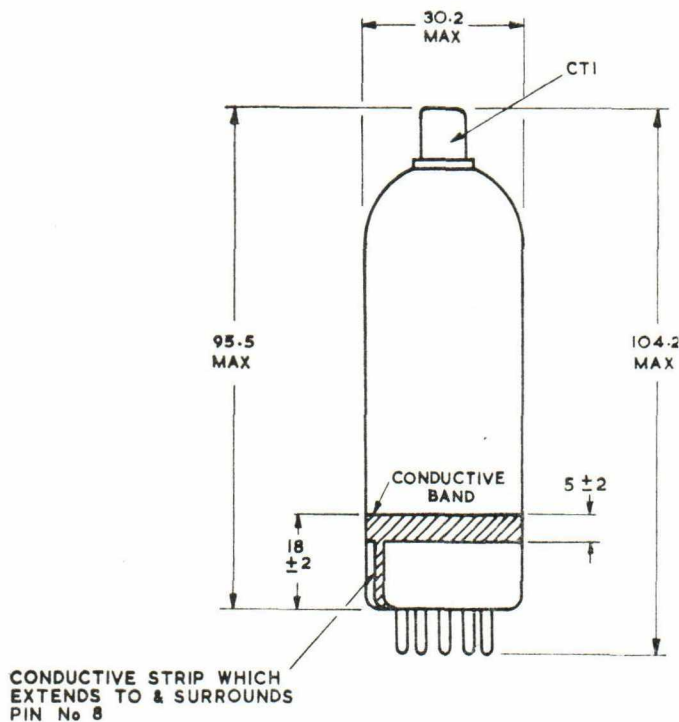
§ Measured without external shield.

CHARACTERISTICS

Anode Voltage	V_a	75	V
Screen Grid Voltage	V_{g2}	200	V
Control Grid Voltage	V_{g1}	-10	V
Anode Current	I_a	440	mA
Screen Grid Current	I_{g2}	30	mA

LINE OUTPUT VALVE CIRCUIT DESIGN

When calculating the peak anode current for circuit design purposes the knee should be taken as the reference point. Operation so that the anode potential of the output valve at the end of scan is above the knee of the anode characteristic is only recommended when an effective feedback stabilising circuit is employed.



All dimensions in mm.

MOUNTING POSITION—Unrestricted.

Characteristic curves are as the PL504.