

# OUTPUT PENTODE

# PL38 PL38M

Output pentode primarily intended for use as line time base output valve in television receivers with series connected heaters.

## HEATER

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

|       |     |    |
|-------|-----|----|
| $I_h$ | 300 | mA |
| $V_h$ | 30  | V  |

## CAPACITANCES

|            | PL38M | PL38 |    |
|------------|-------|------|----|
| $C_{in}$   | 18    | 18   | pF |
| $C_{out}$  | 9.5   | 6.5  | pF |
| $C_{a-g1}$ | <1.0  | <1.2 | pF |

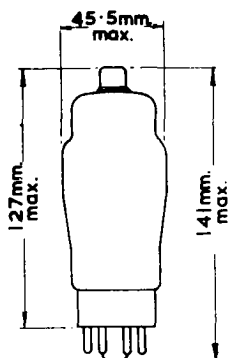
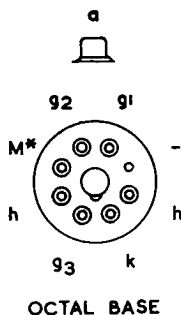
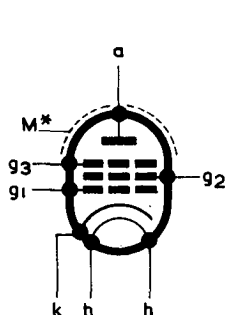
## CHARACTERISTICS

|               |      |            |
|---------------|------|------------|
| $V_a$         | 200  | V          |
| $V_{g2}$      | 200  | V          |
| $V_{g1}$      | -5.5 | V          |
| $I_a$         | 75   | mA         |
| $I_{g2}$      | 9.0  | mA         |
| $g_m$         | 13.5 | mA/V       |
| $r_a$         | 20   | k $\Omega$ |
| $\mu_{g1-g2}$ | 16.5 |            |

## LIMITING VALUES

|                                          |      |            |
|------------------------------------------|------|------------|
| $V_{a(b)}$ max.                          | 1.2  | kV         |
| $V_a$ max.                               | 800  | V          |
| $V_{a(pk)}$ max.                         | 8.0  | kV         |
| $V_{g2(b)}$ max.                         | 800  | V          |
| $V_{g2}$ max.                            | 400  | V          |
| $p_a$ max.                               | 25   | W          |
| $p_{g2}$ max.                            | 8.0  | W          |
| $I_k$ max.                               | 200  | mA         |
| $V_{g1}$ max. ( $I_{g1} = -1.0.3\mu A$ ) | -1.3 | V          |
| * $R_{g1-k}$ max. ( $p_a < 25W$ )        | 500  | k $\Omega$ |
| * $R_{g1-k}$ max. ( $p_a < 9W$ )         | 800  | k $\Omega$ |
| $V_{h-k}$ max.                           | 200  | V          |
| $R_{h-k}$ max.                           | 20   | k $\Omega$ |

\*For self bias operation.



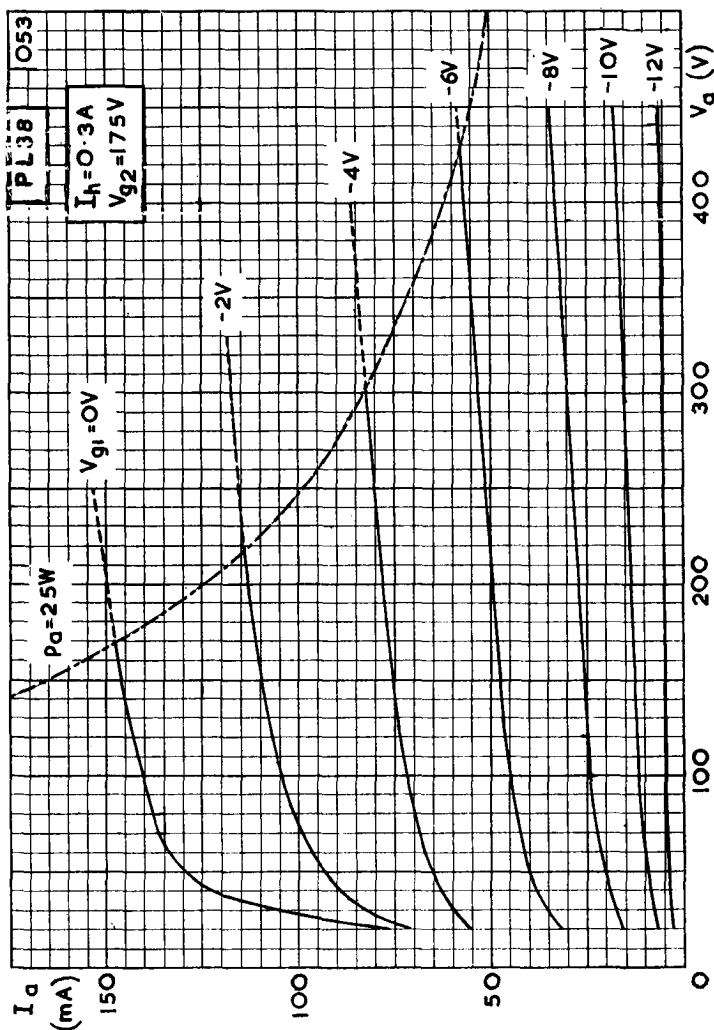
\* External metallising on type PL38M only.

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# PL38

## PL38M

### OUTPUT PENTODE



ANODE CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH  
CONTROL-GRID VOLTAGE AS PARAMETER AT  $V_{g2} = 175V$