

# 4 VALVE DATA PREFERRED TYPES

## A VOLTAGE AMPLIFYING PENTODES

**EF 92**

Miniature H.F. pentode with variable-mu characteristics

### HEATER

$V_h$  6.3 V  $I_h$  0.2 A Suitable for series or parallel operation

### CAPACITANCES

Measured with close fitting metal can and shielded socket

|            |       |                  |
|------------|-------|------------------|
| $C_{a-g1}$ | 0.004 | $\mu\mu\text{F}$ |
| $C_{in}$   | 4.5   | $\mu\mu\text{F}$ |
| $C_{out}$  | 7.0   | $\mu\mu\text{F}$ |

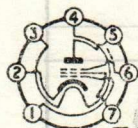
### CHARACTERISTICS

|               |       |      |            |
|---------------|-------|------|------------|
| $V_a$         | 250   | 250  | V          |
| $V_{g2}$      | 150   | 200  | V          |
| $V_{g3}$      | 0     | 0    | V          |
| $I_a$         | 8.0   | 8.0  | mA         |
| $I_{g3}$      | 2.0   | 2.1  | mA         |
| $V_{g1}$      | -0.65 | -2.5 | V          |
| $g_m$         | 2.5   | 2.5  | mA/V       |
| $\mu_{g1-g2}$ | 30    | 30   |            |
| $r_a$         | 0.5   | 0.5  | M $\Omega$ |
| $*V_{g1}$     | -11   | -21  | V          |

\*For 100 : 1 reduction in mutual conductance.

### LIMITING VALUES

|                  |     |            |
|------------------|-----|------------|
| $V_{a(b)}$ max.  | 300 | V          |
| $V_a$ max.       | 250 | V          |
| $P_a$ max.       | 2.5 | W          |
| $V_{g2(b)}$ max. | 300 | V          |
| $V_{g2}$ max.    | 250 | V          |
| $P_{g2}$ max.    | 0.6 | W          |
| $I_k$ max.       | 12  | mA         |
| $R_{g1-k}$ max.  | 3   | M $\Omega$ |
| $V_{h-k}$ max.   | 100 | V          |



BASE:  
B7G

### DIMENSIONS:

L=54 mm  
D=19 mm

**KF 35**

H.F. pentode with variable-mu characteristics

### HEATER

$V_f$  2.0 V  $I_f$  0.05 A Suitable for D.C. operation only

### CAPACITANCES

|            |       |                  |
|------------|-------|------------------|
| $C_{a-g1}$ | <0.01 | $\mu\mu\text{F}$ |
| $C_{in}$   | 8.0   | $\mu\mu\text{F}$ |
| $C_{out}$  | 10.0  | $\mu\mu\text{F}$ |

VOLTAGE AMPLIFYING PENTODES **A**

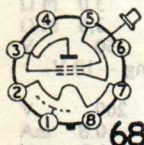
OPERATING CONDITIONS

|          |                                |           |     |     |
|----------|--------------------------------|-----------|-----|-----|
| $V_a$    | 120                            | 120       | 120 | $V$ |
| $V_{g2}$ | 60                             | 120       | 120 | $V$ |
| $V_{g1}$ | -1.5 -2.0 -9.5 -3.0 -5.5 -17.0 | $V$       |     |     |
| $g_m$    | 1,080 800 10 1,500 600 10      | $\mu A/V$ |     |     |
| $I_a$    | 1.45 1.0 — 3.8 1.1 —           | $mA$      |     |     |
| $I_{g1}$ | 0.5 0.35 — 1.0 0.4 —           | $mA$      |     |     |

LIMITING VALUES

|            |         |               |         |
|------------|---------|---------------|---------|
| $V_a$ max. | 150 $V$ | $V_{g2}$ max. | 150 $V$ |
|------------|---------|---------------|---------|

**KF 35**  
(contd.)



BASE:  
Octal

DIMENSIONS:

$L=110$  mm  
 $D=33$  mm

R.F. single diode pentode with variable- $\mu$  characteristics **UAF 42**

HEATER

$V_h$  12.6  $V$   $I_h$  0.1  $A$  Suitable for series operation, A.C. or D.C.

CAPACITANCES

Pentode Section

|            |        |         |
|------------|--------|---------|
| $C_{a-g1}$ | <0.002 | $\mu F$ |
| $C_{out}$  | 5.0    | $\mu F$ |
| $C_{in}$   | 4.5    | $\mu F$ |

Diode section

|             |         |         |
|-------------|---------|---------|
| $C_{ad-k}$  | 3.8     | $\mu F$ |
| $C_{ad-g1}$ | <0.0015 | $\mu F$ |
| $C_{ad-h}$  | <0.15   | $\mu F$ |

OPERATING CONDITIONS as R.F. or I.F. Amplifier

|               |      |      |      |            |
|---------------|------|------|------|------------|
| $V_b$         | 100  | 170  | 200  | $V$        |
| $R_{g2}$      | 56   | 56   | 76   | $K \Omega$ |
| $V_{g2}$      | 50   | 85   | 85   | $V$        |
| $R_k$         | 310  | 310  | 310  | $\Omega$   |
| $V_{g1}$      | -1.2 | -2.0 | -2.0 | $V$        |
| $I_a$         | 2.8  | 5.0  | 5.0  | $mA$       |
| $I_{g2}$      | 0.9  | 1.5  | 1.5  | $mA$       |
| $g_m$         | 1.7  | 2.0  | 2.0  | $mA/V$     |
| $r_a$         | 0.85 | 0.9  | 1.0  | $M \Omega$ |
| $\mu_{g1-g2}$ | 18   | 18   | 18   |            |
| $*V_{g1}$     | -16  | -28  | -34  | $V$        |
| $R_{eq}$      | 5.8  | 7.5  | 7.5  | $K \Omega$ |

\*For 100 : 1 reduction in mutual conductance

