

S.Q. TUBE

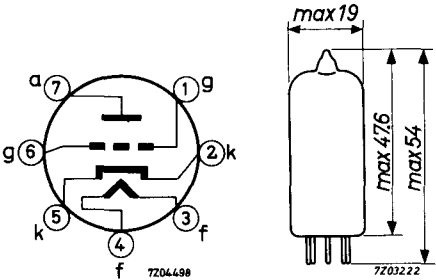
Triode designed for use as grounded grid U.H.F. amplifier for frequencies up to 250 MHz.

| QUICK REFERENCE DATA |                                                       |          |
|----------------------|-------------------------------------------------------|----------|
| Life test            | 500 hours                                             |          |
| Base                 | Miniature 7 pin                                       |          |
| Heating              | Indirect<br>A.C. or D.C.<br>Series or parallel supply |          |
| Heater voltage       | $V_f$                                                 | 6.3 V    |
| Heater current       | $I_f$                                                 | 300 mA   |
| Mutual conductance   | S                                                     | 8.5 mA/V |

DIMENSIONS AND CONNECTIONS

Dimensions in mm

Base: Miniature 7 pin



**CHARACTERISTICS**

|                             |          |               |
|-----------------------------|----------|---------------|
| Anode voltage               | $V_a$    | 250 V         |
| Grid voltage                | $-V_g$   | 1.5 V         |
| Cathode resistor            | $R_k$    | 150 $\Omega$  |
| Anode current               | $I_a$    | 10 mA         |
| Mutual conductance          | $S$      | 8.5 mA/V      |
| Amplification factor        | $\mu$    | 100           |
| Internal resistance         | $R_i$    | 12 k $\Omega$ |
| Equivalent noise resistance | $R_{eq}$ | 400 $\Omega$  |

**CAPACITANCES**

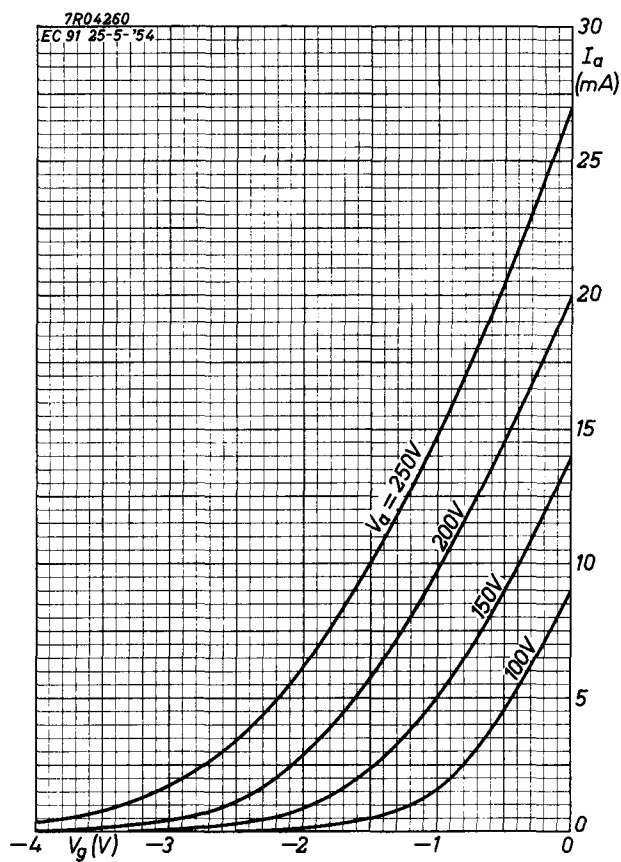
|                             |            |             |
|-----------------------------|------------|-------------|
| Grid to cathode and heater  | $C_{g/kf}$ | 8.5 pF      |
| Anode to cathode and heater | $C_{a/kf}$ | max. 0.2 pF |
| Anode to grid               | $C_{ag}$   | 2.5 pF      |

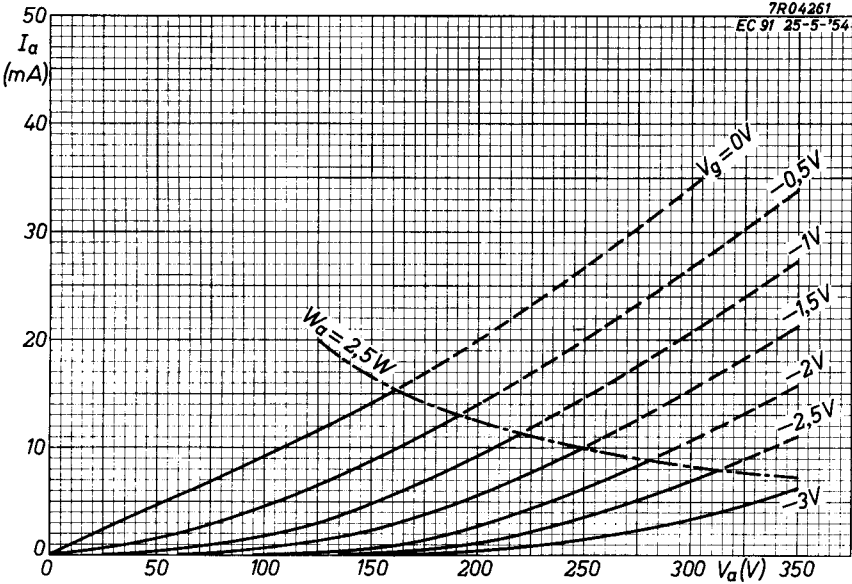
**LIFE**

Production samples are tested during 500 hours.

**LIMITING VALUES** (Absolute max. rating system)

|                                    |          |            |
|------------------------------------|----------|------------|
| Anode voltage                      | $V_{a0}$ | max. 550 V |
|                                    | $V_a$    | max. 250 V |
| Cathode current                    | $I_k$    | max. 15 mA |
| Grid voltage                       | $-V_g$   | max. 100 V |
| Voltage between cathode and heater | $V_{kf}$ | max. 150 V |
| Anode dissipation                  | $W_a$    | max. 2.5 W |





# PHILIPS

## Data handbook



**Electronic  
components  
and materials**

### EC91

| page | sheet | date       |
|------|-------|------------|
| 1    | 1     | 1968.12    |
| 2    | 2     | 1968.12    |
| 3    | 3     | 1968.12    |
| 4    | 4     | 1968.12    |
| 5    | FP    | 2001.04.13 |