

Netzröhre für GW-Heizung  
indirekt geheizt  
Serienspeisung

DC-AC-heating  
Indirectly heated  
connected in series

# TELEFUNKEN

**PCF 801**

**PCF 803**

**Regelbare Pentode-Triode für FS-Mischstufen**  
**Remote cutoff pentode-triode for TV-oscillator and mixer**

$I_f$  \* **300** mA  
 $U_f$  \* ca. **8,5** V

## Meßwerte · Measuring values

### Triode

$U_a$  **100** V  
 $U_g$  **-3** V  
 $I_a$  **15** mA  
 $S$  **9** mA/V  
 $\mu$  **20**

### Pentode

$U_a$  **170** V  
 $U_{g2}$  **120** V  
 $U_{g1}$  **-1,4** V  
 $I_a$  **10** mA  
 $I_{g2}$  **3** mA  
 $S$  **11** mA/V  
 $R_i$  **> 350** k $\Omega$   
 $\mu_{g2g1}$  ca. **55**  
 $r_{aeq}$  **1,5** k $\Omega$   
 $r_{el}$  (50 MHz) **10** k $\Omega$

## Betriebswerte · Typical operation

### Triode als Oszillator · Triode as oscillator

$U_{ba}$  **200** **200** V  
 $R_a$  **8,2** **12** k $\Omega$   
 $R_g$  **10** **10** k $\Omega$   
 $I_a$  **16** **12** mA  
 $U_{osz\ eff}$  **4,5** **3,3** V  
 $S_{eff}^1)$  **3,7** **3,7** mA/V

### Pentode als Mischstufe Pentode as mixer

$U_b$  **200** **200** V  
 $R_a$  **2,7** **4,7** k $\Omega$   
 $R_{g2}$  **27** **27** k $\Omega$   
 $R_{g1}$  **0,1** **1** M $\Omega$   
 $U_{bg1}$  **-1,4** **0** V  
 $I_a$  **10** **9,3** mA  
 $I_{g2}$  **3** **2,9** mA  
 $U_{osz\ eff}$  **1,6** **1,6** V  
 $S_c$  **5** **4,7** mA/V  
 $I_{g1}$  ca. **8** **2,3**  $\mu$ A

### Pentode als ZF-Verstärker Pentode as IF-amplifier

$U_b$  **200** **200** V  
 $R_a$  **2,7** **4,7** k $\Omega$   
 $R_{g2}$  **27** **27** k $\Omega$   
 $R_{g1}$  **0,1** **1** M $\Omega$   
 $U_{bg1}$  **-1,4** **0** V  
 $I_a$  **10** **13** mA  
 $I_{g2}$  **3** **3,9** mA  
 $S$  **11** **14,5** mA/V  
 $S_{(-12V)} / S_{(-1,4V)}$  ca. **1 : 100**

<sup>1)</sup> bezogen auf die Grundwelle · referred to fundamental wave.

\* normierte Anheizzeit.



## Grenzwerte · Maximum ratings

## Triode

|                                |      |            |
|--------------------------------|------|------------|
| $U_{ao}$                       | 550  | V          |
| $U_{ba}$                       | 250  | V          |
| $U_a$                          | 125  | V          |
| $N_a$                          | 1,5  | W          |
| $I_k$                          | 20   | mA         |
| $R_{g1}^{1)}$                  | 500  | k $\Omega$ |
| $U_{ge} (I_g \leq +0,3 \mu A)$ | -1,3 | V          |
| $U_g$                          | -50  | V          |
| $U_{fk}^{2)}$                  | 100  | V          |

## Pentode

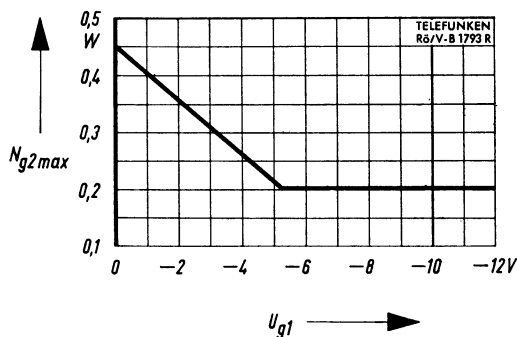
|                         |      |            |
|-------------------------|------|------------|
| $U_{ao}$                | 550  | V          |
| $U_a$                   | 250  | V          |
| $N_a$                   | 2    | W          |
| $U_{g2o}$               | 550  | V          |
| $U_{bg2}$               | 250  | V          |
| $U_{g2}$                | 250  | V          |
| $N_{g2} (U_{g1} = 0 V)$ | 0,45 | W          |
| $I_k$                   | 18   | mA         |
| $R_{g1}^{1)}$           | 1    | M $\Omega$ |
| $R_{g1}^{3)}$           | 2,2  | M $\Omega$ |
| $U_{g1}$                | -50  | V          |
| $U_{fk}^{2)}$           | 100  | V          |

1)  $U_g, U_{g1}$  fest · fixed grid bias

2) Um den Anforderungen für AM-Ton zu erfüllen, soll  $U_{fk\text{eff}}$  kleiner als 50 V sein.

$U_{fk}$  r.m.s. should be lower than 50 V to satisfy requirements for AM sound.

3)  $U_g, U_{g1}$  autom. · cathode grid bias



$$N_{g2\text{max}} = f(U_{g1})$$

## Kapazitäten · Capacitances

mit äußerer Abschirmung an Kathode  
with external screening to cathode

## Triode

|           |     |    |
|-----------|-----|----|
| $c_e$     | 3,3 | pF |
| $c_a$     | 1,7 | pF |
| $c_{g/a}$ | 1,8 | pF |

## Pentode

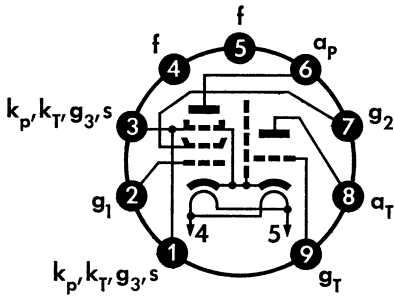
|             |          |    |
|-------------|----------|----|
| $c_e$       | 6,2      | pF |
| $c_a$       | 3,7      | pF |
| $c_{g1/a}$  | 9 (< 12) | pF |
| $c_{g1/g2}$ | 1,6      | pF |

|              |         |    |
|--------------|---------|----|
| $c_{aP/aT}$  | < 0,025 | pF |
| $c_{aP/gT}$  | < 0,010 | pF |
| $c_{g1P/aT}$ | < 0,010 | pF |
| $c_{g1P/gT}$ | < 0,010 | pF |



Sockelschaltbild  
Base connection

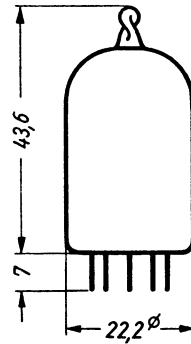
**PCF 801**



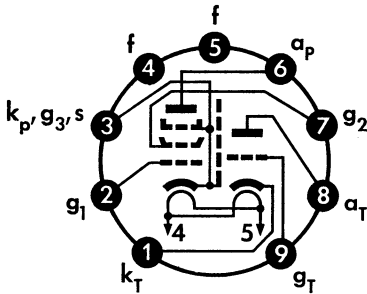
Pico 9 · Noval

max. Abmessungen  
max. dimensions

DIN 41 539, Nenngröße 34, Form A



**PCF 803**



Pico 9 · Noval

Gewicht · Weight  
max. 12 g

Wenn notwendig, muß gegen Herausfallen der Röhre aus der Fassung Vorsorge getroffen werden.  
Special precautions must be taken to prevent the tube from becoming dislodged.