

Type	Allgemeine Daten General data	Betriebswerte Typical operation	Grenzwerte Maximum ratings																																																																																																							
PL 81 Leistungs- pentode für Horizontal- Ablenkstufen in Fernseh- Empfängern NF-Leistungs- verstärker Power pentode for horizontal deflection stages in TV receivers AF power amplifiers	<p>Pico 9, Noval Größe 16 Outlines 16 Stift · Pin 1 — 2 g₁ 3 k 4 f 5 f 6 g₃ 7 — 8 g₂ 9 g₃ Kappe a Cap a</p> <p>I_f = 300 mA U_f ca. 21,5 V indirekt geheizt indir. heated U_a = 170 V U_{g3} = 0 V U_{g2} = 170 V U_{g1} = -22 V I_a = 45 mA I_{g2} = 3 mA S = 6,2 mA/V R_i = 10 kΩ μ_{g2g1} = 5,3 U_a = 200 V U_{g3} = 0 V U_{g2} = 200 V U_{g1} = -28 V I_a = 40 mA I_{g2} = 2,8 mA S = 6 mA/V R_i = 11 kΩ μ_{g2g1} = 5,3</p>	<p>2 Röhren in Gegentakt-B-Betrieb 2 tubes push-pull, class B</p> <table> <tbody> <tr> <td>U_a</td> <td>=</td> <td>170</td> <td>200</td> <td>V</td> </tr> <tr> <td>U_{g3}</td> <td>=</td> <td>0</td> <td>0</td> <td>V</td> </tr> <tr> <td>R_{g2}¹⁾</td> <td>=</td> <td>1</td> <td>1</td> <td>kΩ</td> </tr> <tr> <td>U_{g1}</td> <td>=</td> <td>-27</td> <td>-31,5</td> <td>V</td> </tr> <tr> <td>I_{ao}</td> <td>=</td> <td>2x 20</td> <td>2x 25</td> <td>mA</td> </tr> <tr> <td>I_a ausgest.</td> <td>=</td> <td>2x 73</td> <td>2x 87</td> <td>mA</td> </tr> <tr> <td>R_{g20}</td> <td>=</td> <td>2x 1,5</td> <td>2x 2</td> <td>mA</td> </tr> <tr> <td>I_{g2} ausgest.</td> <td>=</td> <td>2x 10</td> <td>2x 12,5</td> <td>mA</td> </tr> <tr> <td>R_{na}</td> <td>=</td> <td>2,5</td> <td>2,5</td> <td>kΩ</td> </tr> <tr> <td>U_{g1 eff} (N)</td> <td>=</td> <td>19</td> <td>22,5</td> <td>V</td> </tr> <tr> <td>N</td> <td>=</td> <td>13,5</td> <td>20</td> <td>W</td> </tr> <tr> <td>k</td> <td>=</td> <td>5,2</td> <td>5,2</td> <td>%</td> </tr> </tbody> </table> <p>1) R_{g2} gemeinsam · R_{g2} common 2) Impulszeit max. 18% einer Periode, Pulse time max. 18% per period, t_{max} = 18 μs 3) Während der Anheizzeit der Boosterdiode During booster diode warm-up period N_{g2 max} = 6 W 4) U_{g1} nur durch R_{g1} erzeugt U_{g1} produced by voltage drop across R_{g1} only</p> <p>Kapazitäten · Capacitances</p> <table> <tbody> <tr> <td>C_e</td> <td>=</td> <td>14,7</td> <td>pF</td> <td>C_{ak} < 0,1 pF</td> </tr> <tr> <td>C_a</td> <td>=</td> <td>6,4</td> <td>pF</td> <td>C_{g1f} < 0,2 pF</td> </tr> <tr> <td>C_{g1a}</td> <td><</td> <td>0,8</td> <td>pF</td> <td></td> </tr> </tbody> </table>	U _a	=	170	200	V	U _{g3}	=	0	0	V	R _{g2} ¹⁾	=	1	1	kΩ	U _{g1}	=	-27	-31,5	V	I _{ao}	=	2x 20	2x 25	mA	I _a ausgest.	=	2x 73	2x 87	mA	R _{g20}	=	2x 1,5	2x 2	mA	I _{g2} ausgest.	=	2x 10	2x 12,5	mA	R _{na}	=	2,5	2,5	kΩ	U _{g1 eff} (N)	=	19	22,5	V	N	=	13,5	20	W	k	=	5,2	5,2	%	C _e	=	14,7	pF	C _{ak} < 0,1 pF	C _a	=	6,4	pF	C _{g1f} < 0,2 pF	C _{g1a}	<	0,8	pF		<p>U_{ao} = 550 V U_a = 250 V N_a = 8 W U_{g20} = 550 V U_{g2} = 250 V N_{g2} = 4,5 W N_a + N_{g2} = 10 W I_k = 180 mA U_{g1e} (I_{g1}) = +0,3 μA U_{g1} = -1,3 V R_{g1} = 0,5 MΩ U_{f/k} = 200 V R_{f/k} = 20 kΩ</p> <p>Als Endröhre für Horizontalablenkung As power tube for horizontal deflection</p> <table> <tbody> <tr> <td>U_{asp}²⁾</td> <td>=</td> <td>6</td> <td>kV</td> </tr> <tr> <td>U_{asp}²⁾</td> <td>=</td> <td>-1,5</td> <td>kV</td> </tr> <tr> <td>N_a</td> <td>=</td> <td>7</td> <td>W</td> </tr> <tr> <td>N_{g2}³⁾</td> <td>=</td> <td>4,5</td> <td>W</td> </tr> <tr> <td>U_{g1sp}²⁾</td> <td>=</td> <td>3</td> <td>V</td> </tr> <tr> <td>U_{g1sp}²⁾</td> <td>=</td> <td>-1000</td> <td>V</td> </tr> <tr> <td>R_{g1}⁴⁾</td> <td>=</td> <td>2,2</td> <td>MΩ</td> </tr> </tbody> </table>	U _{asp} ²⁾	=	6	kV	U _{asp} ²⁾	=	-1,5	kV	N _a	=	7	W	N _{g2} ³⁾	=	4,5	W	U _{g1sp} ²⁾	=	3	V	U _{g1sp} ²⁾	=	-1000	V	R _{g1} ⁴⁾	=	2,2	MΩ
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