Trioda – pentoda

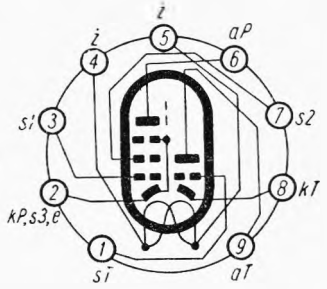
ECL 82

Telefunken

Odchylanie pionowe (TV), wzmacniacz mocy m. cz.

Nowal

$U_ż = 6{,}3\,V$
$I_ż = 780\,mA$



Wartości robocze

	Trioda wzm. m. cz. (RC)			Pentoda kl. A				Przeciwsobnie kl. AB				
U_a				200	200	170	100	200		170		V
U_{ab}	200	170	100									V
U_{s2}				200	170	170	100	200		170		V
U_{s1}				−16	−12,5	−11,5	−6					V
$U_{s1\sim}$				6,6	5,8	6	3,8	0	21,8	0	18	V
$U_{s1\sim}$ [1]				0,6	0,56	0,59	0,65					V
I_a	0,52	0,43	0,23	35	35	41	23	2×35	2×38	2×33	2×37	mA
I_{s2}				7	6,5	8	5	2×7	2×16	2×6,2	2×15	mA
S_a				6,4	6,8	7,5	6,8					mA/V
ϱ_a				20	20,5	16	15					kΩ
R_a		220		5,6	5,6	4	4					kΩ
R_{aa}									5		5	kΩ
h	1,6	2,3	4	10	10	10	10	0	4,8	0	4	%
R_k	2,2	2,7	2,7	0,380	0,3	0,235	0,195	190		160		kΩ
k_u	52	51	47									V/V
$P_{wyj\sim}$				3,5	3,4	3,3	1,05	0	9	0	7	W

Pojemności

	Trioda	Pentoda			Trioda/Pentoda	
C_{wej}	3	9,3	pF	$C_{aT/s1P}$	< 0,02	pF
C_{wyj}	4,3	8	pF	$C_{sT/s1P}$	< 0,02	pF
$C_{a/s1}$	4,5	<0,3	pF	$C_{aT/aP}$	<0,025	pF
$C_{s1/w}$	<0,1	0,3	pF	$C_{sT/aP}$	< 0,25	pF

[1] (50 mW)

TYPY PODOBNE

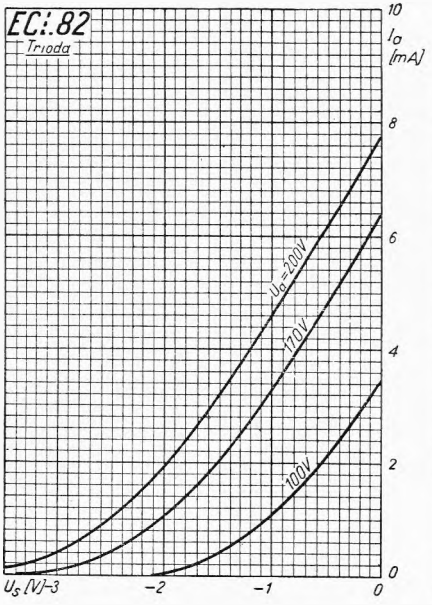
6 BM 8, PCL 83

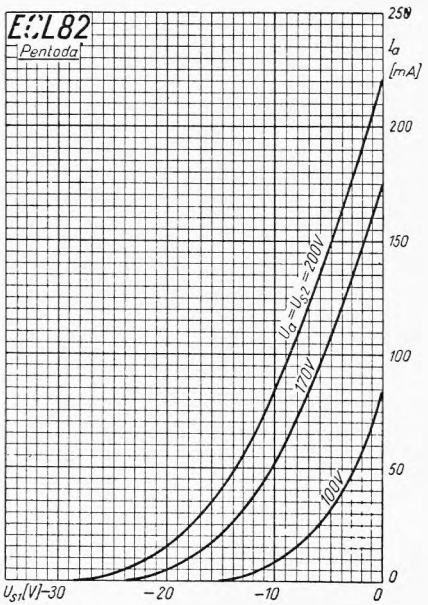
Wartości charakterystyczne

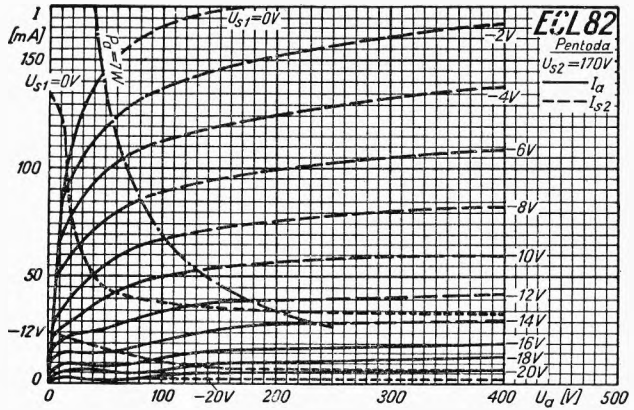
	Trioda	Pentoda			
U_a	100	200	170	100	V
U_{s2}		200	170	100	V
U_{s1}	0	—16	—11,5	—6	V
$U_a\sim$		26	25	15	V
I_a	3,5	35	41	26	mA
I_{s2}		7	8	5	mA
K_a	70				V/V
S_a	2,5	6,5	7,5	6,8	mA/V
ϱ_a	28	20	16	15	kΩ
$K_{s2/s1}$		9,5	9,5	10	V/V

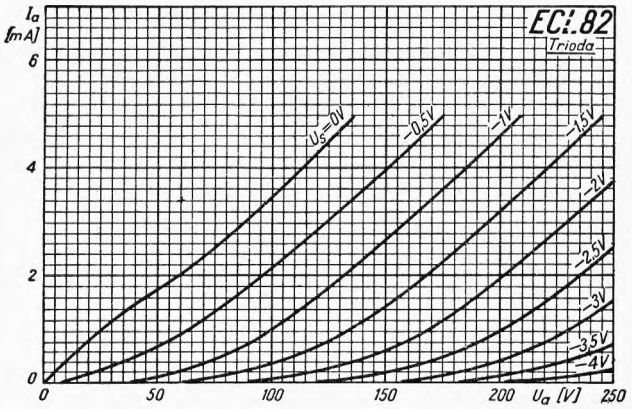
Wartości graniczne

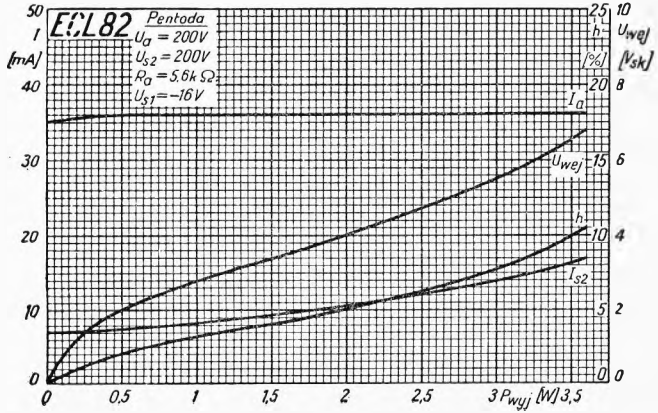
	Trioda	Pentoda	
U_{a0max}	550	900	V
U_{amax}	300	600	V
$U_{aszczmax}$	600	2500	V
$-U_{aszczmax}$		500	V
U_{s20max}		550	V
U_{s2max}		300	V
P_{amax}	1	7	W
P_{s2max}		3,2	W
I_{kmax}	15	50	mA
$I_{kszczmax}$	250	125	mA
R_{s1max}(aut.)	3	2	MΩ
R_{s1max}(st.)	1	1	MΩ
$U_{w/kmax}$	100	100	V
$R_{w/kmax}$	20	20	kΩ

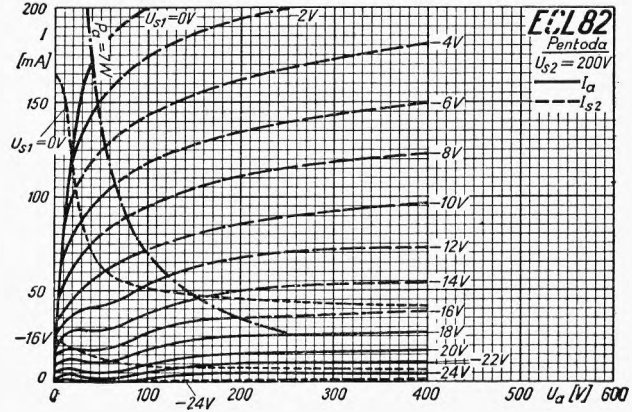


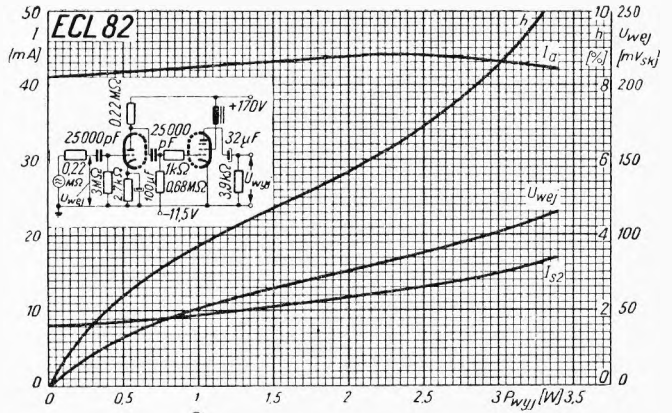


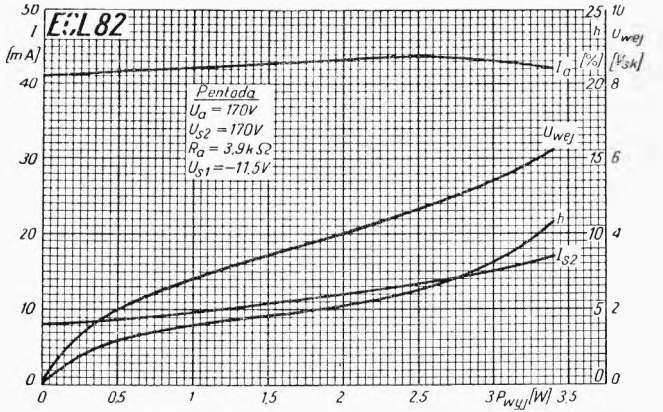

ECL82
Pentoda
U_{s2}=170V
I_a
I_{s2}
U_{s1}=0V
P_a=1W
-2V
-4V
-6V
-8V
-10V
-12V
-14V
-16V
-18V
-20V
[mA]
150
100
50
-12V
0
100
-20V
200
300
400
U_a [V]
500

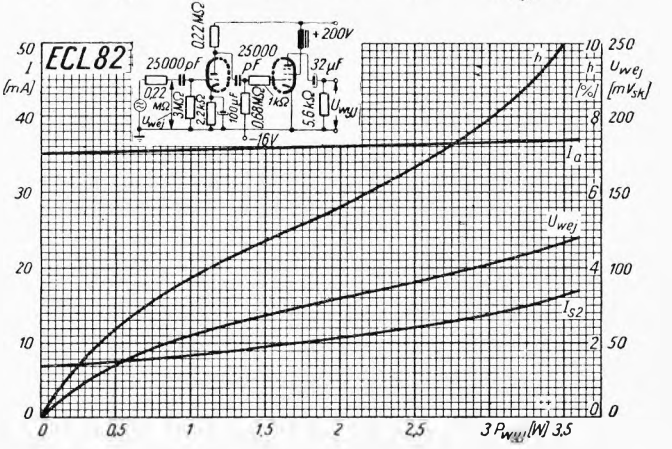

ECL82
Trioda
I_a
[mA]
6
4
2
0
U_s=0V
-0,5V
-1V
-1,5V
-2V
-2,5V
-3V
-3,5V
-4V
50
100
150
200
U_a [V]
250

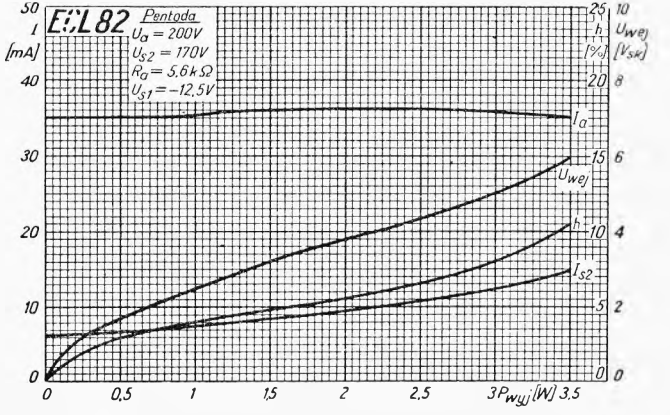

ECL82
Pentoda
U_a = 200V
U_{s2} = 200V
R_a = 5.6k Ω
U_{s1} = -16V
50
1
[mA]
40
30
20
10
0
I_a
U_{wej}
h_1
I_{s2}
25
20
15
10
5
0
h
[%]
10
8
6
4
2
0
U_{wej}
[V_{sk}]
0,5
1
1,5
2
2,5
3
P_{wyj} [W] 3,5


ECL82
Pentoda
U_{s2}=200V
I_a
I_{s2}
U_{s1}=0V
P_a=1W
2V
-4V
-6V
-8V
-10V
-12V
-14V
-16V
-18V
-20V
-22V
-24V
200
1
[mA]
150
100
50
-16V
0
100
-24V
200
300
400
500
U_a [V]
600


ECL 82
[mA]
h
[%]
U_{wej}
[mV_{sk}]
I_a
U_{wej}
I_{s2}
$3P_{wyj}$ [W] 3,5
0,22 MΩ
25000pf
25000 pF
32 µF
1kΩ
0,68MΩ
3,9kΩ
+170V
−11,5V


ECL 82
Pentoda
U_a = 170V
U_{s2} = 170V
R_a = 3,9kΩ
U_{s1} = −11,5V
[mA]
h
[%]
U_{wej}
[V_{sk}]
I_a
U_{wej}
I_{s2}
$3P_{wyj}$ [W] 3,5


ECL 82
0,22 MΩ
25000pf
25000 pF
32 µF
1kΩ
2,2kΩ
100µF
0,68MΩ
5,6kΩ
+200V
−16V
[mA]
h
[%]
U_{wej}
[mV_{sk}]
I_a
U_{wej}
I_{s2}
$3P_{wyj}$ [W] 3,5


ECL 82
Pentoda
U_a = 200V
U_{s2} = 170V
R_a = 5,6kΩ
U_{s1} = −12,5V
[mA]
h
[%]
U_{wej}
[V_{sk}]
I_a
U_{wej}
I_{s2}
$3P_{wyj}$ [W] 3,5