



*Toshiba*  
QUALITY SINCE 1875

**TUBES ELECTRONIQUES**  
**ELEKTRONENRÖHREN**

FD

## TABLEAU DES TOSHIBA TUBES ELECTRONIQUES CARACTERISTIQUES TABELLE DER TOSHIBA ELEKTRONENRÖHREN EIGENSCHAFTEN

Type Typ	Classes Klasse	Culot Sockel	Cathode Kathode			U <sub>a</sub> (V)	U <sub>g1</sub> (V)	U <sub>g2</sub> (V)	I <sub>a</sub> (mA)	I <sub>g2</sub> (mA)	R <sub>i</sub> (KΩ)	S (mA/V)	μ	R <sub>a</sub> (Ω)	P <sub>a</sub> (W)	Note	Type américain Amerikanischer Typ	
			Chauf. Heizart	U <sub>f</sub> (V)	I <sub>f</sub> (A)													
DY70	Z	SM 1	dir.	1.25	0.2	Up(V) 10000 max, Ip(mA) 5 max, Io(mA) 0.25 max, f (c/s) 5000 min.											5642	
DY80	Z	No 24	dir.	1.25	0.2	Up(V) 22000 max, Ip(mA) 45 max, Io(mA) 0.5 max, f (kc) 300 max.											1X2B	
DY87	Z	No 65	ind.	1.4	0.55	Up(V) 27000 max, Ip(mA) 40 max, Io(mA) 0.88 max.											1S2A	
E91AA	A + A	Mi 19	ind.	6.3	0.3	Up(V) 330 max, Ip(mA) 54 max, Io(mA) 9 max.											par element pro element	5726 (6AL5)
E95F	F	Mi 29	ind.	6.3	0.175	120	Rk=200Ω	120	7.5	2.5	340	5000	—	—	—	5654 (6AK5)		
E180F	F	No 58	ind.	6.3	0.3	190	Rk=630Ω	160	13	3.3	90	16500	U <sub>bg1</sub> =+9.0V		—	6688		
EAA91	A + A	Mi 19	ind.	6.3	0.3	Up(V) 330 max, Ip(mA) 54 max, Io(mA) 9 max.											par element pro element	6AL5
EB91	A + A	Mi 19	ind.	6.3	0.3	Up(V) 330 max, Ip(mA) 54 max, Io(mA) 9 max.											par element pro element	6AL5
EBC90	A + A + C	Mi 6	ind.	6.3	0.3	250	— 3	—	1.0	—	58	1200	70	Diode Io 250 μAmax		par element pro element	6AT6	
EBC91	A + A + C	Mi 6	ind.	6.3	0.3	250	— 2	—	1.2	—	62.5	1600	100	Diode Io 250 μAmax		par element pro element	6AV6	
EBF89	A + A + Fv-μ	No 5	ind.	6.3	0.3	Up(V) 200 max, 250 — 2		Ip(mA) 5 max, 100 9		Io(mA) 0.8 max, 2.7 1000		3800	—	—	—	diode	6DC8	
EC90	C	Mi 50	ind.	6.3	0.15	250	— 8.5	—	10.5	—	7.7	2200	17	—	—	pentode	6C4	
EC94	C	Mi 35	ind.	6.3	0.225	80	Rk=150Ω	—	17.5	—	2.1	6500	13.5	—	—	—	6AF4A	
EC900	C	Mi 98	ind.	6.3	0.18	135	— 1	—	11.5	—	—	14500	72	—	—	thw=11.0 sec.	6HA5	
ECC81	C + C	No 15	ind.	6.3 12.6	0.3 0.15	250	Rk=200Ω — 2.0	—	10.0	—	10.9	5500	60	—	—	par element pro element	12AT7	
ECC82	C + C	No 15	ind.	6.3 12.6	0.3 0.15	250 100	— 8.5 0	—	10.5 11.8	—	7.7 6.5	2200 3100	17 20	—	—	par element pro element	12AU7A	
ECC83	C + C	No 15	ind.	6.3 12.6	0.3 0.15	250 100	— 2.0 — 1.0	—	1.2 0.5	—	62.5 80.0	1600 1250	100 100	—	—	par element pro element	12AX7A	
ECC85	C + C	No 53	ind.	6.3	0.435	250	— 2.0	—	10	—	—	5900	57	—	—	—	6AQ8	
ECC88	C + C	No 53	ind.	6.3	0.365	90	— 1.3	—	15	—	—	12500	33	—	—	—	6DJ8	
ECC91	C + C	Mi 15	ind.	6.3	0.45	100	Rk=50Ω	—	8.5	—	7.1	5300	38	—	—	thw=11.0 sec. par element pro element	6J6A	
ECC180	C + C	No 53	ind.	6.3	0.4	150	Rk=220Ω	—	9	—	5.9	6400	38	U <sub>g</sub> =-10		—	6BQ7A	
ECC189	C + C	No 53	ind.	6.3	0.365	90	— 1.2	—	15	—	—	12500	—	—	—	—	6ES8	
ECF80	C + F	No 55	ind.	6.3	0.43	170 100	— 2 — 2	170	10 14	2.8	400	6200 5000	— 20	—	—	pentode triode	6BL8	
ECF82	C + F	No 55	ind.	6.3	0.45	125 125	— 1 — 1	110	9.5 13.5	3.5	200	5000 7500	— 40	—	—	thw=11.0 sec. pentode triode	6U8A	
ECF86	C + F	No 95	ind.	6.3	0.34	170 100	— 1.2 — 3.0	150	10 14	3.3	350	12000 5500	(g1-g2) 70 17	—	—	pentode triode	6HG8	
ECF801	C + F	No 207	ind.	6.3	0.41	100 170	— 3 — 1.2	—	15 10	—	350	9000 11000	20 55	—	—	triode pentode	6GJ7	
ECF802	C + F	No 55	ind.	6.3	0.43	200 100	— 2 — 1	—	3.5 6.0	—	400	3500 5500	70 47	—	—	triode pentode	6JW8	
ECH81	C + H	No 17	ind.	6.3	0.3	100 250	0 — 2	—	13.5 6.5	—	700	3700 2400	22	—	—	triode heptode	6AJ8	
ECH84	C + H	No 200	ind.	6.3	0.3	50 135	0 0	—	3.0 1.7	—	—	3700 2200	50	—	—	triode heptode thw=14 sec.	6JX8	
ECL80	C + L	No 18	ind.	6.3	0.3	200 100	— 8 0	200	17.5 8.0	3.3	150	3300 1900	— 20	11000	1.4	—	thw=14.0 sec.	6AB8
ECL82	C + L	No 63	ind.	6.3	0.78	100 170 200 100 100	— 6 — 11.5 — 16 — 1 0	100	26 41	5 8	15 16	6800 7500 6400 1900 2500	— — — 70 70	3900 3900 5600	1.05 3.3 3.52	} pentode } triode	6BM8	

Type Typ	Classes Klasse	Culot Socket	Cathode Kathode			U <sub>a</sub> (V)	U <sub>g1</sub> (V)	U <sub>g2</sub> (V)	I <sub>a</sub> (mA)	I <sub>g2</sub> (mA)	R <sub>i</sub> (KΩ)	S (mA/V)	μ	R <sub>a</sub> (Ω)	P <sub>a</sub> (W)	Note	Type américain Amerikanischer Typ	
			Chauf. Heizart	U <sub>f</sub> (V)	I <sub>f</sub> (A)													
ECL84	C+L	No 74	ind.	6.3	0.72	200 220	-1.7 -3.4	—	3.0 18.0	—	—	4000 10000	65 —	—	—	triode pentode	6DX8	
ECL85	C+L	No 96	ind.	6.3	0.9	100 170	-0.8 -15	—	5.0 41	—	7.6 25	6500 7500	50 —	—	—	triode pentode	6GV8	
ECL86	C+L	No 84	ind.	6.3	0.7	250 250 250	-1.7 -7 —	—	1.2 36† 36†	—	—	1600 10000	100 — —	— — —	— — —	triode pentode	6GW8	
EF80	F	No 7	ind.	6.3	0.3	250	-3.5	250	10	2.8	650	6800	—	—	—		6BX6	
EF93	F <sub>v</sub> -μ	Mi 28	ind.	6.3	0.3	250	Rk=68Ω	100	11.0	4.2	1000	4400	—	—	—		6BA6	
EF94	F	Mi 28	ind.	6.3	0.3	250	Rk=68Ω	150	10.6	4.3	1000	5200	—	—	—	thw=11.0 sec.	6AU6A	
EF95	F	Mi 29	ind.	6.3	0.175	180	Rk=180Ω	120	7.7	2.4	500	5100	—	—	—		6AK5	
EF183	F <sub>v</sub> -μ	No 7	ind.	6.3	0.3	200	-2	90	12	4.5	500	12500	—	Eg3=0	—	thw=14 sec.	6EH7	
EF184	F	No 7	ind.	6.3	0.3	200	-2.5	200	10	4.1	350	15000	—	—	—	thw=14 sec.	6E J 7	
EH90	H	Mi 31	ind.	6.3	0.3	100	U <sub>g3</sub> = -1 U <sub>g4</sub> = 0	U <sub>g2</sub> = 30 U <sub>g4</sub> = 30	1	I <sub>g2</sub> = I <sub>g4</sub> = 1.3	1000	(g <sub>1</sub> -a) 1100	—	—	—	thw=11.0 sec.	6C S 6	
EK90	H	Mi 31	ind.	6.3	0.3	250 100	U <sub>g3</sub> = -1.5 = -1.5	100 100	2.9 2.6	6.8 7.0	1000 400	475 455	Osc	I <sub>g1</sub> =0.5 mA R <sub>g1</sub> =20 KΩ	—	—	—	6BE6
EL84	L	No 20	ind.	6.3	0.76	250	-7.3	250	48.0†	5.5†	38	11300	—	5200	5.7		6BQ5	
EL86	L	No 20	ind.	6.3	0.76	170	-12.5	170	70 †	5 †	(Approx.) 23	10000	—	2400	5.6		6CW5	
EL90	L	Mi 30	ind.	6.3	0.45	250	-12.5	250	45.0†	4.5†	52	4100	—	5000	4.5	thw=11.0 sec.	6AQ5A	
EL500	L	Mn 1	ind.	6.3	1.38	75	-10	200	440	37	—	—	—	—	—		6GB5	
EZ80	Z+Z	No 27	ind.	6.3	0.6	AC U <sub>tr</sub> - 350 Vac, I <sub>o</sub> =90 mA dc										6V4		
EZ81	Z+Z	No 27	ind.	6.3	1.0	U <sub>p</sub> (V) 1000 max, I <sub>p</sub> (mA) 450 max, I <sub>o</sub> (mA) 150 max, U <sub>tr</sub> (V) 350 max.										6CA4		
EZ90	Z+Z	Mi 33	ind.	6.3	0.6	U <sub>p</sub> (V) 1250 max, I <sub>p</sub> (mA) 210 max. U <sub>tr</sub> (V) 325, I <sub>o</sub> (mA) 70 max.										6X4		
GZ34	Z+Z	Oc 54	ind.	5.0	1.9	U <sub>p</sub> (V) 1700 max, I <sub>p</sub> (mA) 825 max, I <sub>o</sub> (mA) (c) 250 max.										5AR4		
HBC91	A+A+C	Mi 6	ind.	12.6	0.15	250	-2	—	1.2	—	62.5	1600	100	Diode I <sub>o</sub> 250 μA max.	par element pro element	12AV6		
HCC85	C+C	No 53	ind.	17.5	0.15	200	-2.1	—	10	—	—	5800	48	—	—		17EW8	
HCH81	C+H	No 17	ind.	12.6	0.15	250 100	-2 0	100 —	6.5 13.5	3.8 —	700 —	2400 3700	— 22	—	—	heptode triode	12A J 7	
HF93	F <sub>v</sub> -μ	Mi 28	ind.	12.6	0.15	250	Rk=68Ω	100	11.0	4.2	1000	4400	—	—	—		12BA6	
HF94	F	Mi 28	ind.	12.6	0.15	250	Rk=68Ω	150	10.6	4.3	1000	5200	—	—	—		12AU6	
HK90	H	Mi 31	ind.	12.6	0.15	250 100	U <sub>g3</sub> = -1.5 = -1.5	100 100	2.9 2.6	6.8 7.0	1000 400	475 455	Osc	I <sub>g1</sub> =0.5 mA, R <sub>g1</sub> =20 kΩ	—	—	—	12BE6
HL92	L	Mi 30	ind.	50	0.15	120	8.0	110	49†	4 †	10	7500	—	2500	2.3		50C5	
HY90	Z	Mi 34	ind.	35.0	0.15	U <sub>p</sub> (V) 330 max, I <sub>p</sub> (mA) 660 max, I <sub>o</sub> (mA) 100 max.										35W4		
PC900	C	Mi 98	ind.	3.9	0.3	135	-1	—	11.5	—	—	14500	72	—	—	thw=11.0 sec.	4HA5	
PCC85	C+C	No 53	ind.	9.0	0.3	100	-1.0	—	5.0	—	—	5000	50	—	—	thw=14 sec.	9AQ8	
PCC88	C+C	No 53	ind.	7.0	0.3	90	-1.3	—	15	—	—	12500	33.0	—	—	thw=14 sec.	7D J 8	
PCC189	C+C	No 53	ind.	7.2	0.3	90	-1.2	—	15	—	—	12500	—	—	—	thw=14 sec	7E S 8	
PCF80	C+F	No 55	ind.	9.0	0.3	170 100	-2 -2	170 —	10 14	2.8 —	400 —	6200 5000	— 20	— —	— —	pentode triode thw=14 sec	9A8	

Type Typ	Classes Klasse	Culot Sockel	Cathode Kathode			U <sub>a</sub> (V)	U <sub>g1</sub> (V)	U <sub>g2</sub> (V)	I <sub>a</sub> (mA)	I <sub>g2</sub> (mA)	R <sub>i</sub> (KΩ)	S (mA/V)	#	R <sub>a</sub> (Ω)	P <sub>a</sub> (W)	Note	Type américain Amerikanischer Typ
			Chauf. Heizart	U <sub>f</sub> (V)	I <sub>f</sub> (A)												
PCF82	C+F	No 55	ind.	9.45	0.3	125 125	-1 -1	110 —	9.5 13.5	35 —	200 —	5000 7500	— 40	— —	— —	pentode triode	9U8A
PCF86	C+F	No 95	ind.	7.6	0.3	170 100	-1.2 -3.0	150 —	10 14	3.3 —	350 3.1	12000 5500	(g1-g2) 70 17	—	—	pentode triode thw=14 sec	7HG8
PCF801	C+F	No 207	ind.	8.5	0.3	100 170	-3 -1.2	120 —	15 10	3.0 —	— 350	9000 11000	20 55 (g2-g1)	—	—	triode pentode thw=14 sec	8G J 7
PCF802	C+F	No 55	ind.	9.0	0.3	200 100	-2 -1	— 100	3.5 6.0	— 1.7	— 400	3500 5500	70 47 (g1-g2)	—	—	triode pentode thw=14 sec	9J W8
PCL82	C+L	No 63	ind.	16.0	0.3	200 100	-16 0	200 —	35 3.5	7.0 —	20 —	6400 2500	— 70	5600 —	3.5 —	pentode triode thw=14 sec	16A8
PCL84	C+L	No 74	ind.	15	0.3	220 220	-3.4 -1.7	220 —	18 3	3.0 —	150 —	10000 4000	— 65	— —	— —	pentode triode thw=14 sec	15DQ8
PCL85	C+L	No 96	ind.	18.0	0.3	170 100	-15 -0.8	170 —	41 5	2.7 —	25 7.6	7250 6500	(g1-g2) 7 50	— —	— —	pentode triode thw=14 sec	18GV8
PCL86	C+L	No 84	ind.	14.5	0.3	250 250	-1.7 —	250 —	1.2 36 †	— 5.5 †	— 45	1600 10000	100 21 (g1-g2)	— 7000	— 4.2	triode pentode thw=14 sec	14GW8
PL36	L	Oc 98	ind.	25	0.3	100	-7.7	100	100 †	7 †	5.3	14000	—	—	—	thw=14 sec	25E5
PL84	L	No 20	ind.	15	0.3	170	-12.5	170	70 †	5.0 †	23	10000	8 (g1-g2)	2400	5.6	thw=14 sec	15CW5
PL500	L	Mn 1	ind.	27	0.3	75	-10	200	440	37	—	—	—	—	—	thw=14 sec	27GB5
PY88	Y	No 29	ind.	30	0.3	U <sub>p</sub> (V) 6000 max, I <sub>p</sub> (mA) 550 max. I <sub>o</sub> (mA) 220 max.									thw=14 sec	30AE3	

Toshiba fabrique les tubes électroniques qui répondent aux besoins des toutes les branches de l'industrie électronique.

L'emploi des dernières découvertes techniques nous permet de créer constamment une nouvelle gamme de produits pour mieux servir nos clients.

Quelques 500 sortes de tubes actuellement mis en vente pourront toujours satisfaire votre commande.

Toshiba stellt Elektronenröhren her, dass die Anforderungen aller Gebiete der elektronischen Industrie erfüllen.

Die Benutzung der modernen technischen Erfindungen erlaubt uns, stetig neue Erzeugnisse für unsere Kunden zu schaffen.

Ungefähr 500 Röhrentypen, die gegenwärtig vorhanden sind, können immer Ihre Wünsche genügen.

### Sens des abreviations par lettres Buchstaben-kennzeichen

ind. à chauffage indirect  
Indirekt geheizt  
dir. à chauffage direct  
Direkt geheizt  
chauf. chauffage  
† Zero signal  
Null signal

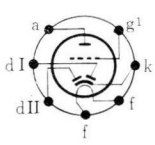
A Diode de haute fréquence  
Hochfrequenzdiode  
C Triode de réception  
Empfängertriode  
F Penthode ou tétrode HF à penta fixe  
Hochfrequenzpentode oder Tetrode  
Fv-mu Penthode ou tétrode HF à pente variable.  
Regelbare Hochfrequenzpentode oder Tetrode

H Heptode (Hexode)  
Heptode (Hexode)  
Y Booster diode  
Schalterdiode  
Z Tube redresseur  
Gleichrichterröhre  
# Coefficient d'amplification  
Verstärkungsfaktor

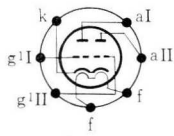
## TUBE IMAGE DE TELEVISION RECTANGULAIRE RECHTECKIGE FERNSEHBILDROHRE

Type Typ	dimensions Abmessungen (mm)			Angle de deviation Ablenkungswinkel	Diameter Diameter (mmφ)	Chauffage Heizung		Note
	diagonale diagonale	largeur largeur	hauteur hauteur			U <sub>f</sub> (V)	I <sub>f</sub> (A)	
310DB4	310	274	222	110°	28	6.3	0.3	
310XB4	310	250	196	110°	20	4.2	0.45	
230DB4	227	183	143	90°	20	12.6	0.075	Tube Image de Transister Télévision. Bildröhre für Transister Fernseh
280DB4	278	223	177	90°	20	12.6	0.075	"
310LB4	310	250	196	110°	20	12.6	0.075	"
400KB22	348	313	246	70°	50.8	6.3	0.9	Tube Image de Télévision en couleurs. Farb Fernseh Bildröhre.

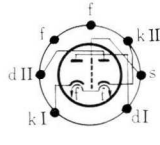
## Connexions du culot Sockelanschlüsse



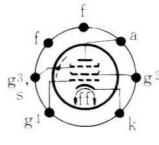
EBC90 HBC91  
EBC91  
Mi 6



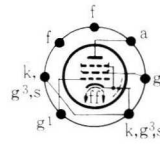
ECC91  
Mi 15



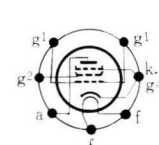
E91AA  
EB91  
Mi 19



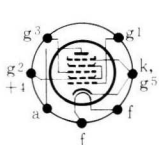
EF93 EF94  
HF93 HF94  
Mi 28



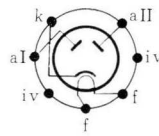
E95F  
EF95  
Mi 29



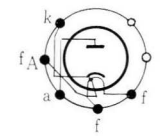
HL92  
EL90  
Mi 30



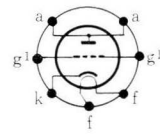
HK90 EK90  
EH90  
Mi 31



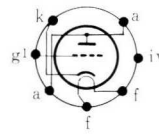
EZ90  
Mi 33



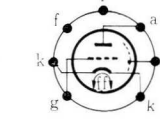
HY90  
Mi 34



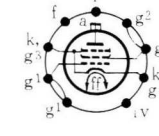
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Mi 35



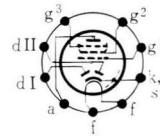
EC90  
Mi 50



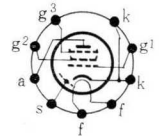
EC900  
PC900  
Mi 98



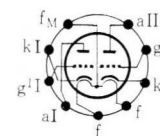
EL500  
PL500  
Mn 1



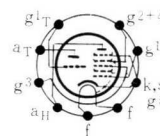
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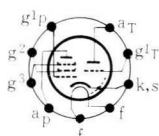
EF80 EF184  
EF183  
No 7



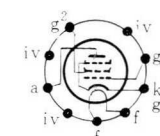
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No 15



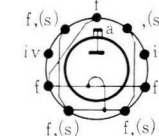
ECH81  
HCH81  
No 17



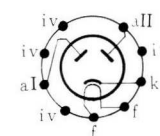
ECL80  
No 18



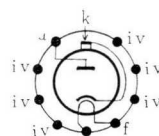
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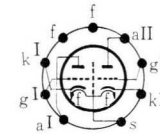
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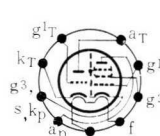
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No 27



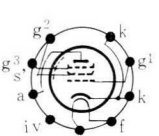
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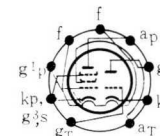
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No 53



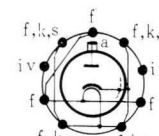
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ECF82 PCF802  
PCF80 ECF802  
No 55



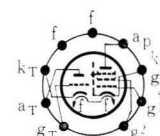
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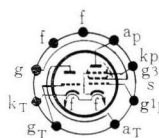
ECL82  
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No 63



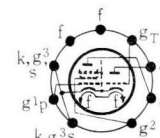
Dy 87  
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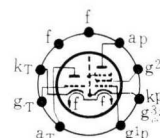
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No 74



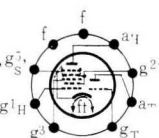
PCL86  
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No 84



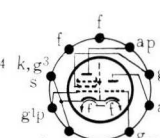
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PCF86  
No 95



ECL85  
PCL85  
No 96



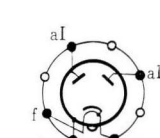
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No 200



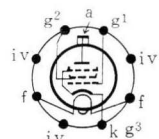
ECF801  
PCF801  
No 207



DY70  
SM 1



GZ34  
Oc 54



PL36  
Oc 98

Mi Miniature  
Mn Magnoval

No Noval  
SM Subminiature

Oc Oktal

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