

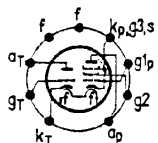
								Röhrentyp			Röhrentyp		
EM 83	EM 84 EM 840	EM 84 a	EM 85	EM 87 6 HU 6	EM 800	EMM 801							
1	L (3+3)	L+3	L+3	L+3	L+3	L (3+3)	1	Zahl der Elektroden			Zahl der Elektroden	1	
2	MW	MB	MB	MF	MB	MW	2	Verwendungszweck			Verwendungszweck	2	
3	No 67	No 75	No 75	No 75	No 75	No 75	3	Sockelschaltung			Sockelschaltung	3	
4	~	~	~	~	~	~	4	Betriebsart			Betriebsart	4	
5	6,3	6,3	6,3	6,3	6,3	6,3	5	U_f	V	Heizspannung	U_f	V	5
6	0,3	0,21	0,27	0,3	0,3	0,3	6	I_f	A	Heizstrom	I_f	A	6
7	ind	ind	ind	ind	ind	ind	7	Heizart			Heizart	7	
8	AA	AA	AA	AA	AA	AA	8	Verwendet als			Verwendet als	8	
9	ϕ 250	ϕ 250	ϕ 250	ϕ 250	ϕ 250	ϕ 240	9	$U_a \phi U_b$	V	Anodenspannung ϕ Betriebsspannung	$U_a \phi U_b$	V	9
10	a) $U_{st} = 250$						10	$U_{g3} \phi U_{g3+5}$	V	Gitterspannungen	$U_{g3} \phi U_{g3+5}$	V	10
11	b) $U_{st} = 0$						11	$U_{g2} \phi U_{g2+4}$	V		$U_{g2} \phi U_{g2+4}$	V	11
12	a) 0...-8 b) 0...-16	0...-22	0...-10	0...-18	0...-10 (-15)	0...-20	12	$U_{g1} \phi U_{g4}$	V		$U_{g1} \phi U_{g4}$	V	12
13	ϕ 3000	ϕ 3000	ϕ 3000	ϕ 3000	ϕ 1000	je ϕ 2000	13	$R_k \phi R_{g1}$	k Ω	Katodenwiderstand ϕ Gitterwiderstand	$R_k \phi R_{g1}$	k Ω	13
14		0,45...0,06 ϕ 1...1,8	0,45...0,06 ϕ 1,1...1,6	0,5...0,12 ϕ 2,1...2,9	2...0,5 (0,2) ϕ 1...1,8 (2)	1,0...0,35 ϕ 1,0...1,8	14	$I_a \phi I_L \phi I_{aS}$	mA	Anodenstrom im Arbeitspunkt ϕ Leuchtschirmstrom ϕ Anodenstrom im Schwingbetrieb	$I_a \phi I_L \phi I_{aS}$	mA	14
15							15	$I_{g2} (+4) \phi I_{g3+5}$ ϕI_{rg}	mA	Schirmgitterstrom ϕ Raumladegitterstrom	$I_{g2} (+4) \phi I_{g3+5}$ ϕI_{rg}	mA	15
16	Leuchthöhe	Schattenlänge:	Schattenlänge:	1 α β : 100...0°	Schattenlänge: 21...0 (-1,5)* mm	Leuchtröhre 3...30 mm	16	$S \phi S_c \phi S_0 (S_{eff})$	mA/V	Steilheit ϕ Mischsteilh. ϕ Anschwingsteilh. (Eff. Steilh.)	$S \phi S_c \phi S_0 (S_{eff})$	mA/V	16
17	a) 4...23 b) 3...18 mm	21...0 mm	21...0 mm				17	$\mu \phi \mu_{g2/g1}$		Leerlaufverstärkungsfaktor	$\mu \phi \mu_{g2/g1}$		17
18	je 1000	470	470	470	100	200	18	R_i ϕr_e [100 MHz]	k Ω	Innenwiderstand ϕ Eingangswiderstand bei 100 MHz	R_i ϕr_e [100 MHz]	k Ω	18
19							19	$R_a \phi R_{a/a}$	k Ω	opt. Außenwiderstand ϕ zwischen Anode und Anode	$R_a \phi R_{a/a}$	k Ω	19
20							20	$R_{g2} (+4) \phi R_{g3} \phi R_{g4}$	k Ω	Schirmgittervorwiderstand	$R_{g2} (+4) \phi R_{g3} \phi R_{g4}$	k Ω	20
21							21	$r_{ii} \phi V$	k $\Omega \phi$ fach	äq. Rauschwiderstand ϕ Verstärkung	$r_{ii} \phi V$	k $\Omega \phi$ fach	21
22							22	k	%	Klirrfaktor	k	%	22
23							23	$U_{g eff} \phi U_{g/eff}$	V	Gitterwechselspannung ϕ zwischen Gitter und Gitter	$U_{g eff} \phi U_{g/eff}$	V	23
24							24	$P_a \phi P_e$	W	Sprechleistung ϕ Nutzleistung	$P_a \phi P_e$	W	24
25							25	f_{max} $\phi I_d \phi i_d$	MHz mA	obere Grenzfrequenz ϕ Diodenstrom ϕ Diodenspitzenstrom	f_{max} $\phi I_d \phi i_d$	MHz mA	25
26	8	3	3	6	5	5	26	$I_k \phi i_k$	mA	Katodenstrom ϕ Katodenspitzenstrom	$I_k \phi i_k$	mA	26
27	0,5	0,5	0,5	0,5	0,6	0,6	27	P_{av}	W	max. Anodenverlustleistung	P_{av}	W	27
28	300	300	300	300	300	250	28	$U_a \phi \hat{U}_a$ $\phi \hat{U}_d$	V	max. Anodenspannung ϕ Anodenspitzenspannung ϕ Diodenspitzenspannung	$U_a \phi \hat{U}_a$ $\phi \hat{U}_d$	V	28
29							29	$P_{g2} (+4) v$ $\phi P_{g3} (+5) v \phi P_{g2dv}$	W	max. Schirmgitterbelastung ϕ bei voller Aussteuerung	$P_{g2} (+4) v$ $\phi P_{g3} (+5) v \phi P_{g2dv}$	W	29
30		ϕ 170...300	ϕ 150...300	ϕ 150...300	ϕ 170...300	ϕ 170...250	30	$U_{g2} (+4) \phi U_{g3} (+5)$ $\phi U_{Lmin u max}$	V	max. Schirmgitterspannung ϕ Leuchtschirmspannung	$U_{g2} (+4) \phi U_{g3} (+5)$ $\phi U_{Lmin u max}$	V	30
31	3	3	3	3	3	3	31	$R_{g1} \phi R_{g3} \phi R_{g4}$	M Ω	max. Gitterwiderstand	$R_{g1} \phi R_{g3} \phi R_{g4}$	M Ω	31
32	100	100	100	100	100	100	32	$U_{f/k} \phi \hat{U}_{f/k}$	V	Spannung zwischen Katode und Heizfaden	$U_{f/k} \phi \hat{U}_{f/k}$	V	32
33							33	$c_{g1/a} \phi c_{a/k}$	pF	Gitter/Anode-Kapazität ϕ Anode/Katode-Kapazität	$c_{g1/a} \phi c_{a/k}$	pF	33
34				3,5			34	$c_e \phi c_{k/g} \phi f (+s)$	pF	Eingangskapazität ϕ in Gitterbasisschaltung	$c_e \phi c_{k/g} \phi f (+s)$	pF	34
35				4,5			35	$c_a \phi c_{a/g} \phi f (+s)$	pF	Ausgangskapazität ϕ in Gitterbasisschaltung	$c_a \phi c_{a/g} \phi f (+s)$	pF	35

Betriebswerte (statisch = statische Meßwerte)

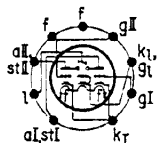
Grenzwerte

Mittelwerte

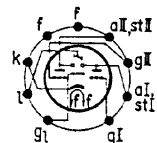
* in (): Oberlappen der Leuchtfelder



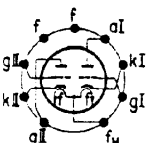
No 69



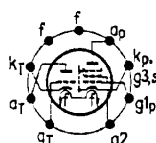
No 71



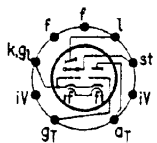
No 72



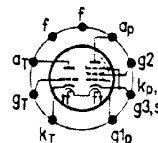
No 73



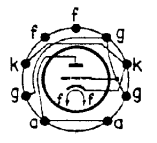
No 74



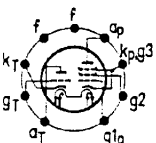
No 75



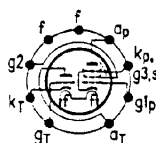
No 78



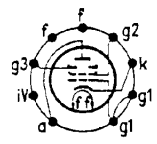
No 79



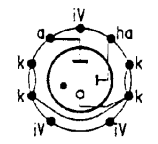
No 82



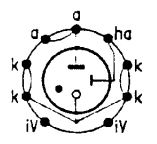
No 84



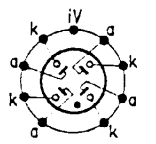
No 85



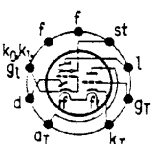
No 86



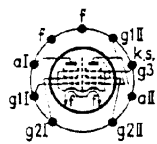
No 86a



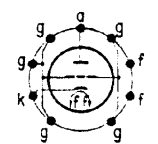
No 87



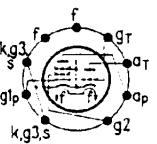
No 88



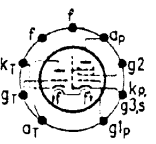
No 89



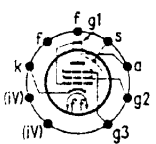
No 90



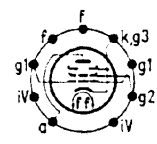
No 95



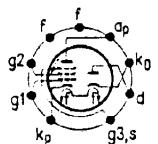
No 96



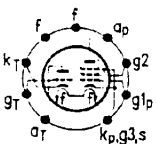
No 103



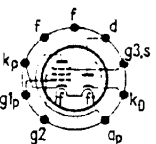
No 104



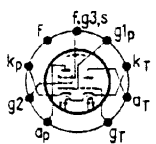
No 108



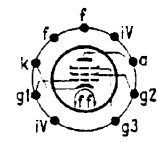
No 110



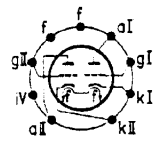
No 111



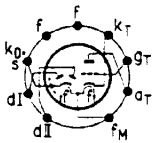
No 113



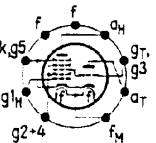
No 114



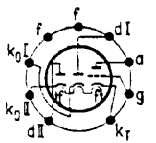
No 115



No 116



No 117



No 120