

DOUBLE TRIODE for use as R.F. amplifier and self-oscillating mixer in carradio sets. The tube can be directly operated from a storage battery

DOUBLE TRIODE pour l'utilisation comme amplificatrice H.F. et tube mélangeur auto-oscillateur dans récepteurs auto-radio. Le tube peut fonctionner directement d'un accumulateur

DOPPELTRIODE zur Verwendung als HF-Verstärker und selbstschwingende Mischröhre in Autoempfängern. Die Röhre kann direkt von einer Batterie betrieben werden

Heating : indirect by A.C. or D.C.;
parallel supply

Chauffage: indirect par C.A. ou C.C.;
alimentation parallèle

Heizung : indirekt durch Wechsel-
oder Gleichstrom; Paral-
lelspeisung

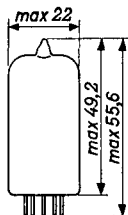
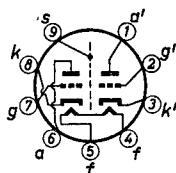
$$V_f = 6,3 \text{ V}$$

$$I_f = 330 \text{ mA}$$

Dimensions in mm

Dimensions en mm

Abmessungen in mm



Base, culot, Sockel: NOVAL

Capacitances

Capacités

Kapazitäten

$$C_a = 1,8 \text{ pF} \quad C_{a'} = 1,8 \text{ pF}$$

$$C_g = 3 \text{ pF} \quad C_{g'} = 3 \text{ pF}$$

$$C_{ag} = 1,3 \text{ pF} \quad C_{a'g'} = 1,3 \text{ pF}$$

$$C_{aa'} < 0,05 \text{ pF}$$

$$C_{gg'} < 0,005 \text{ pF}$$

$$C_{ag'} < 0,005 \text{ pF}$$

$$C_{a'g} < 0,005 \text{ pF}$$

Typical characteristics (each section)

Caractéristiques types (chaque système)

Kenndaten (jedes System)

$$V_a = 6,3 \text{ V}$$

$$V_g = -0,4 \text{ V}$$

$$I_a = 0,9 \text{ mA}$$

$$S = 2,6 \text{ mA/V}$$

$$\mu = 14$$

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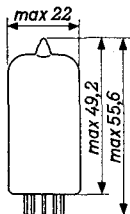
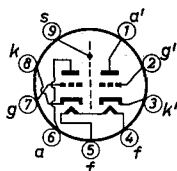
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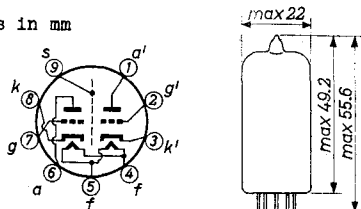
HEATING

Indirect by A.C. or D.C.; parallel supply

Heater voltage $V_f = 6.3 \text{ V}$

Heater current $I_f = 330 \text{ mA}$

Dimensions in mm



Base: NOVAL

CAPACITANCES

Grid to all other elements
except anode

$$C_g = C_{g'} = 3.0 \text{ pF}$$

Anode to all other elements
except grid

$$C_a = C_{a'} = 1.8 \text{ pF}$$

Anode to grid

$$C_{ag} = C_{a'g'} = 1.3 \text{ pF}$$

Anode to anode of other section

$$C_{aa'} < 0.05 \text{ pF}$$

Grid to grid of other section

$$C_{gg'} < 0.005 \text{ pF}$$

Anode to grid of other section

$$C_{ag'} < 0.005 \text{ pF}$$

$$C_{a'g} < 0.005 \text{ pF}$$

TYPICAL CHARACTERISTICS (each triode)

Anode voltage

$$V_a = 6.3 \text{ V}$$

Anode current

$$I_a = 0.9 \text{ mA}$$

Grid voltage

$$V_g = -0.4 \text{ V}$$

Mutual conductance

$$S = 2.6 \text{ mA/V}$$

Amplification factor

$$\mu = 14$$

Operating characteristics as R.F. amplifier

Caractéristiques d'utilisation comme amplificateur H.F.

Betriebsdaten als HF-Verstärker

V_a	=	6,3	12,6	V
V_{bg}	=	0	0	V
R_g	=	100	100	k Ω
I_a	=	0,9	2,5	mA
S	=	2,6	4,6	mA/V
R_1	=	5	3,4	k Ω

Operating characteristics as self-oscillating mixer

Caractéristiques d'utilisation comme tube mélangeur auto-oscillateur

Betriebsdaten als selbstschwingende Mischröhre

V_{ba}	=	6,3	12,6	V
R_a	=	500	500	Ω
R_g	=	220	220	k Ω
V_{osc}	=	0,7	1,0	V_{eff}
I_a	=	0,4	1,0	mA
S_c	=	0,8	1,3	mA/V
R_1	=	11	8	k Ω

Limiting values (each section)

Caractéristiques limites (chaque système)

Grenzdaten (jedes System)

V_a	=	max.	30	V
W_a	=	max.	0,6	W
I_k	=	max.	20	mA
R_g	=	max.	1	M Ω
V_{kf}	=	max.	30	V
R_{kf}	=	max.	20	k Ω

Operating characteristics as R.F. amplifier (one triode)
 Caractéristiques d'utilisation en amplificateur H.F.
 (une triode)

Betriebsdaten als HF-Verstärker (eine Triode)

V_a	= 6,3	12,6	25	V
V_{bg}	= 0	0	0	V
R_g	= 100	100	100	k Ω
I_a	= 0,9	2,5	7,5	mA
S	= 2,6	4,6	7,8	mA/V
R_1	= 5	3,4	2,1	k Ω
R_{eq}	= 1	-	-	k Ω

Operating characteristics as self-oscillating mixer (one triode)

Caractéristiques d'utilisation en mélangeuse auto-oscillante (une triode)

Betriebsdaten als selbstschwingende Mischstufe (eine Triode)

V_{ba}	= 6,3	12,6	25	V
R_a	= 500	500	500	Ω
R_g	= 220	220	220	k Ω
V_{osc}	= 0,7	1,0	1,5	V_{eff}
I_a	= 0,4	1,0	2,6	mA
S_c	= 0,8	1,3	2,0	mA/V
R_1	= 11	8	5,3	k Ω

Limiting values (each system)

Caractéristiques limites (chaque système)

Grenzdaten (jedes System)

V_a	= max.	30	V
W_a	= max.	0,6	W
I_k	= max.	20	mA
V_{kf}	= max.	30	V

Max. circuit values

Valeurs max. des éléments de montage

Max. Werte der Schaltungsteile

R_g	= max.	1	M Ω
R_{kf}	= max.	20	k Ω

OPERATING CHARACTERISTICS for use as R.F. amplifier (each triode)

Anode voltage	$V_a = 6.3$	12.6	25 V
Grid supply voltage	$V_{bg} = 0$	0	0 V
Grid resistor	$R_g = 100$	100	100 k Ω
Anode current	$I_a = 0.9$	2.5	7.5 mA
Mutual conductance	$S = 2.6$	4.6	7.8 mA/V
Internal resistance	$R_i = 5$	3.4	2.1 k Ω
Equivalent noise resistance	$R_{eq} = 1$	-	- k Ω

OPERATING CHARACTERISTICS for use as self-oscillating mixer (each triode)

Anode supply voltage	$V_{ba} = 6.3$	12.6	25 V
Anode resistor	$R_a = 500$	500	500 Ω
Grid resistor	$R_g = 220$	220	220 k Ω
Oscillator voltage	$V_{osc} = 0.7$	1.0	1.5 V(RMS)
Anode current	$I_a = 0.4$	1.0	2.6 mA
Conversion conductance	$S_c = 0.8$	1.3	2.0 mA/V
Internal resistance	$R_i = 11$	8	5.3 k Ω

LIMITING VALUES (Design centre limits; each triode)

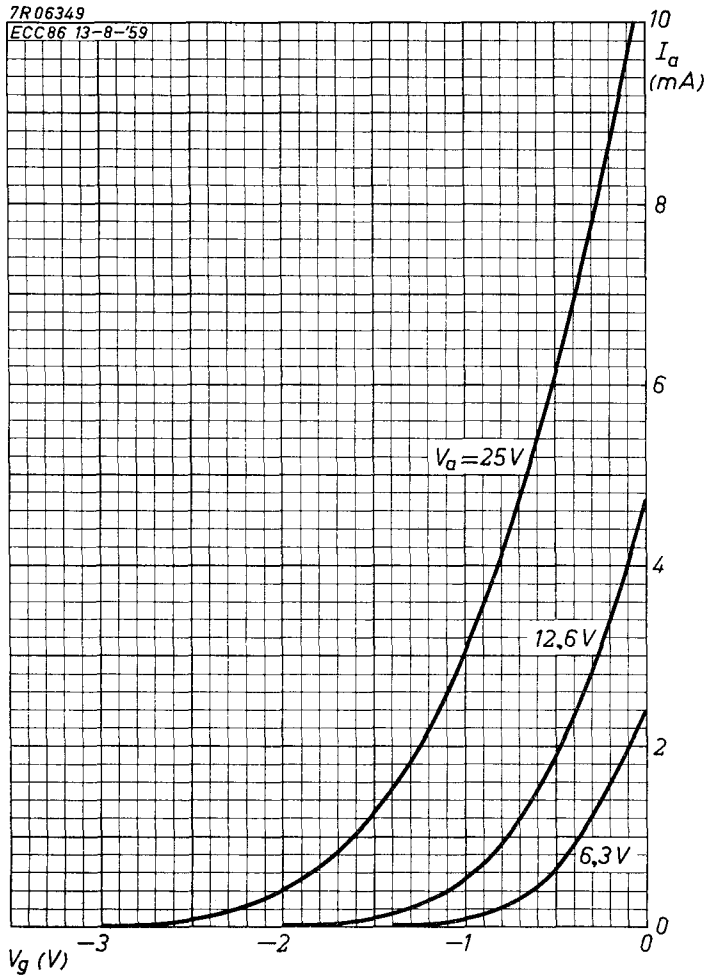
Anode voltage	$V_a = \text{max.}$	30 V
Anode dissipation	$W_a = \text{max.}$	0.6 W
Grid circuit resistance	$R_g = \text{max.}$	1 M Ω
Cathode current	$I_k = \text{max.}$	20 mA
Voltage between heater and cathode	$V_{kf} = \text{max.}$	30 V
Circuit resistance between heater and cathode	$R_{kf} = \text{max.}$	20 k Ω

PHILIPS

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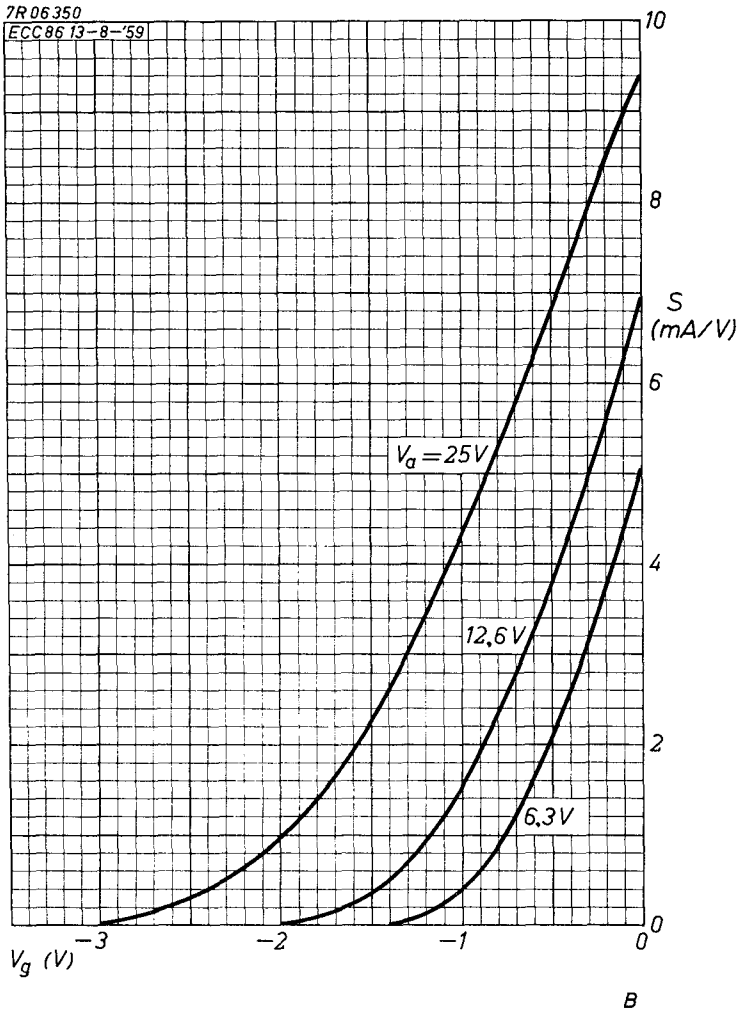
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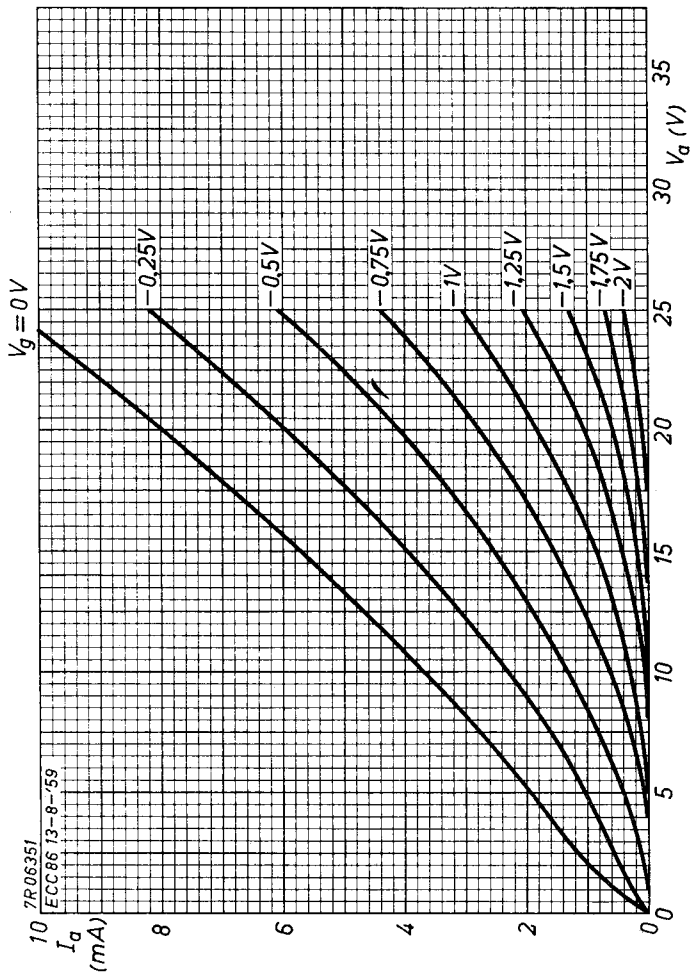
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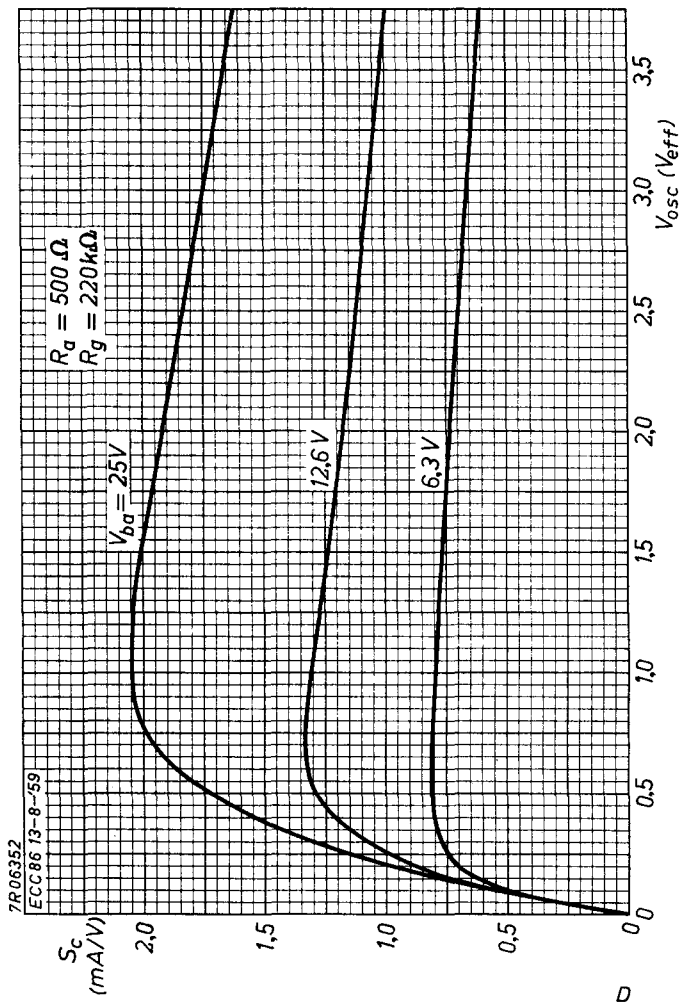
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3	1	1962.09.09
4	2	1958.03.03
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6	2	1962.09.09
7	A	1959.08.08
8	B	1959.08.08
9	C	1959.08.08
10	D	1959.08.08
11	FP	2005.05.06