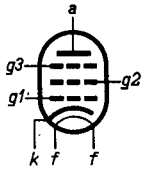
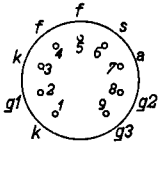
R.F. PENTODE with variable mutual conductance for use as wide-band amplifier
PENTHODE H.F. à pente variable pour utilisation en amplificatrice à large bande
HF- PENTODE mit veränderlicher Steilheit zur Verwendung als Breitbandverstärker

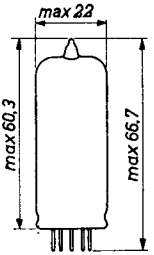
Heating: indirect by A.C. or D.C.; parallel or series supply
Chauffage: indirect par C.A. ou C.C.; alimentation en parallèle ou en série
Heizung: indirect durch Wechsel- oder Gleichstrom; Serien- oder Parallelschaltung

Vf = 6,3 V
If = 300 mA

Dimensions in mm
Dimensions en mm
Abmessungen in mm







Base, culot, Sockel: NOVAL

Capacitances
Capacités
Kapazitäten

C_a = 3,2 pF
C_{g1} = 6,9 pF
C_{ag1} < 0,007 pF
C_{g1f} < 0,15 pF

Operating characteristics for use as R.F. or I.F. amplifier
Caractéristiques d'utilisation en amplificatrice H.F. ou M.F.
Betriebsdaten als H.F.- oder Z.F.-Verstärker

$V_a=V_b$	=		250			V
V_{g3}	=		0			V
R_{g2}	=		60			kΩ
V_{g1}	=	-2	-35			V
V_{g2}	=	100	-			V
I_a	=	10	-			mA
I_{g2}	=	2,5	-			mA
S	=	6,0	0,06			mA/V
R_i	=	0,6	>5			MΩ
R_{eq}	=	1,4	-			kΩ
r_{g1} [3]	=	9	-			kΩ
→ μ_{g2g1}	=	26	-			
$V_a=V_b$	=	250		250		V
V_{g3}	=	0		0		V
R_{g2}	=	18 [1]		22 [2]		kΩ
V_{g1}	=	-1,9	-35	-2,1	-35	V
V_{g2}	=	97	-	103	-	V
I_a	=	10	-	10	-	mA
I_{Rg2}	=	8,5	-	6,7	-	mA
S	=	6,0	0,06	6,0	0,06	mA/V
R_i	=	0,6	> 5	0,6	> 5	MΩ
R_{eq}	=	1,4	-	1,4	-	kΩ

[1]) Common screen-grid resistor of EF 85 and ECH 81 as frequency changer.
Résistance grille-écran commune des tubes EF 85 et ECH 81 comme tube mélangeur.
Gemeinsamer Schirmgitterwiderstand der Röhren EF 85 und ECH 81 als Mischröhre.

[2]) Common screen-grid resistor of EF 85 and ECH 81 as R.F. or I.F. amplifier.
Résistance grille-écran commune des tubes EF 85 et ECH 81 comme tube amplificateur H.F. ou M.F.
Gemeinsamer Schirmgitterwiderstand der Röhren EF 85 und ECH 81 als H.F.- oder Z.F.-Verstärker.

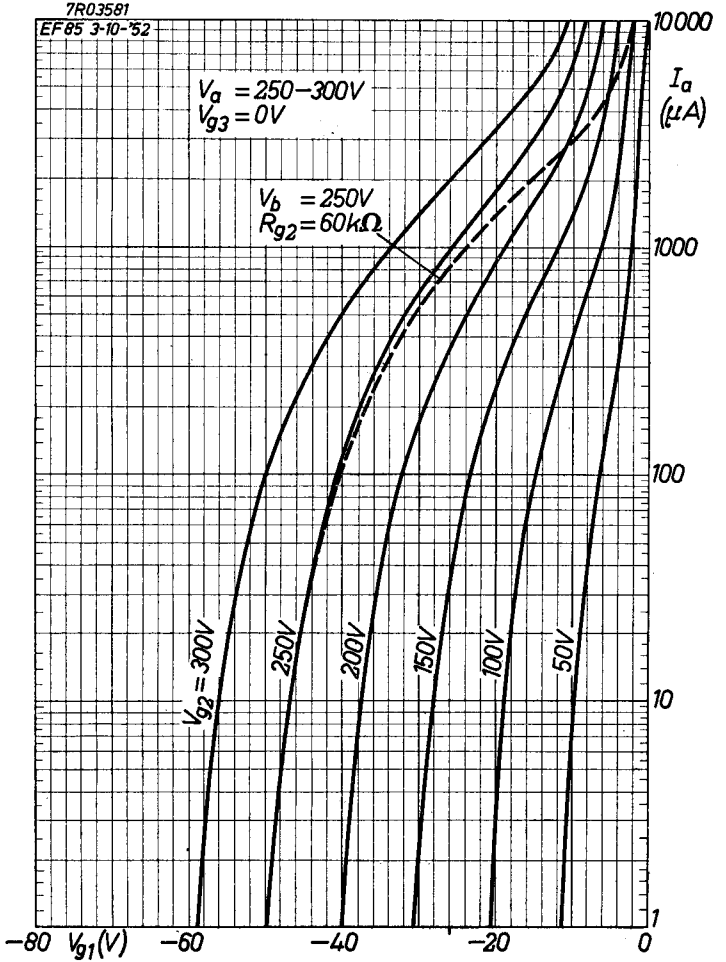
[3]) Input resistance at 50 Mc/s. Résistance d'entrée à 50 Mc/s. Eingangswiderstand bei 50 MHz.

Limiting values
Caractéristiques limites
Grenzdaten

V_{ao}	= max.	550	V
V_a	= max.	250	V
W_a	= max.	2,5	W
V_{g2o}	= max.	550	V
V_{g2}	= max.	250	V
W_{g2}	= max.	0,65	W
I_k	= max.	15	mA
V_{g1} (I_{g1}= +0,3µA)	= max.	-1,3	V
R_{g1}	= max.	3	MΩ
R_{kf}	= max.	20	kΩ
V_{kf}	= max.	150	V

PHILIPS

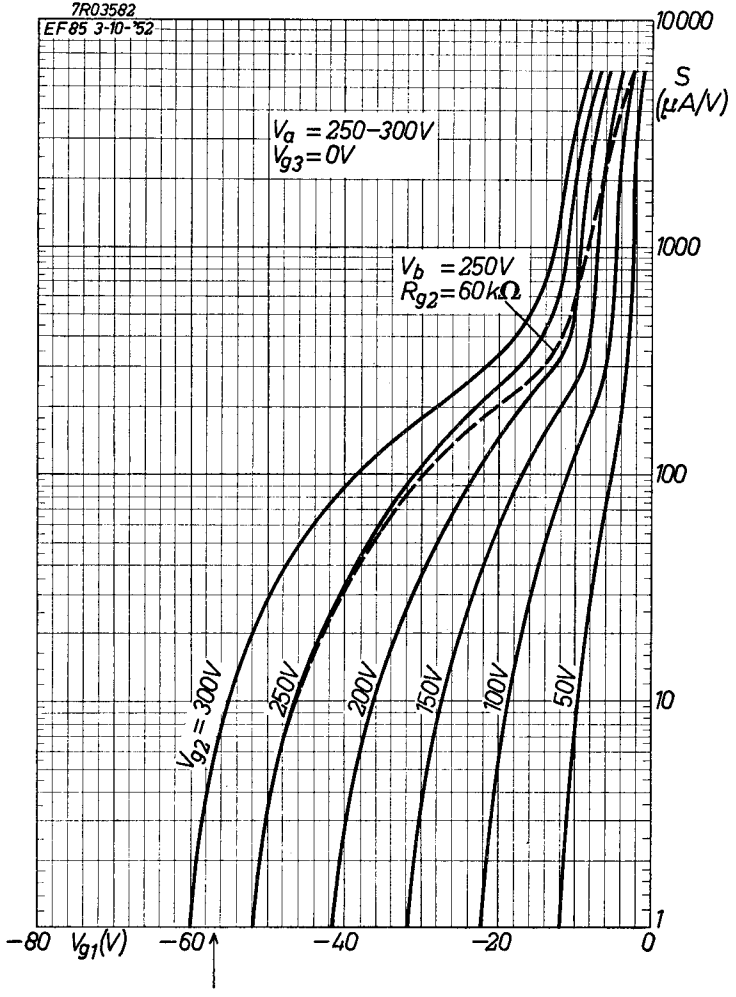
EF 85



10.10.1952

A

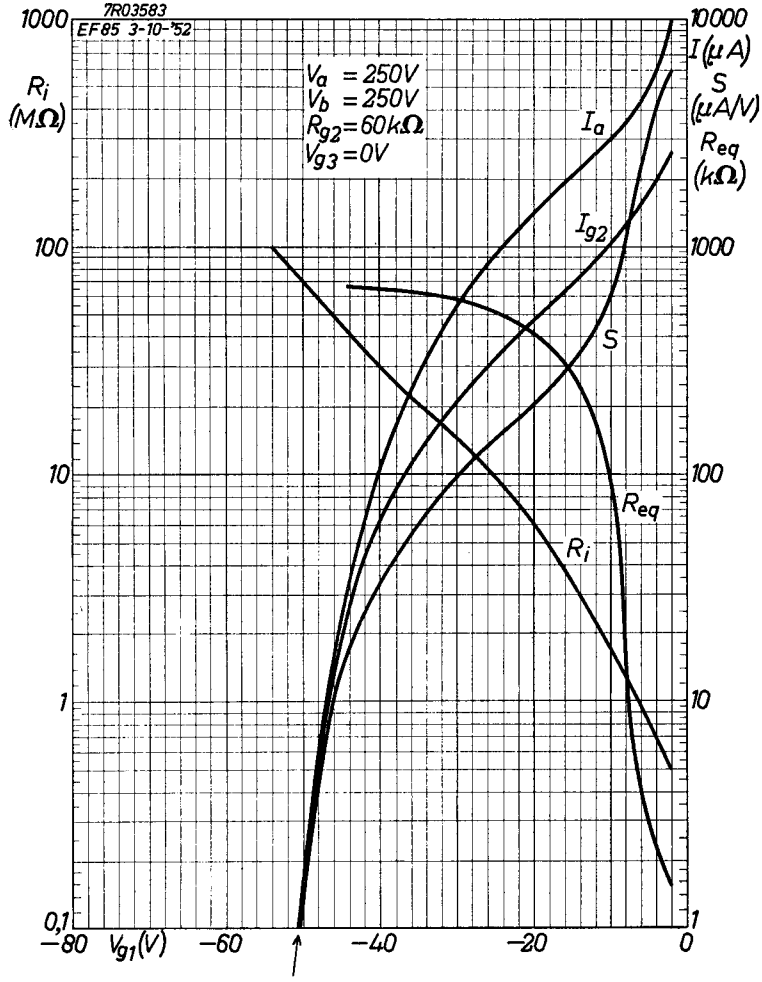
EF 85 PHILIPS



B

PHILIPS

EF 85



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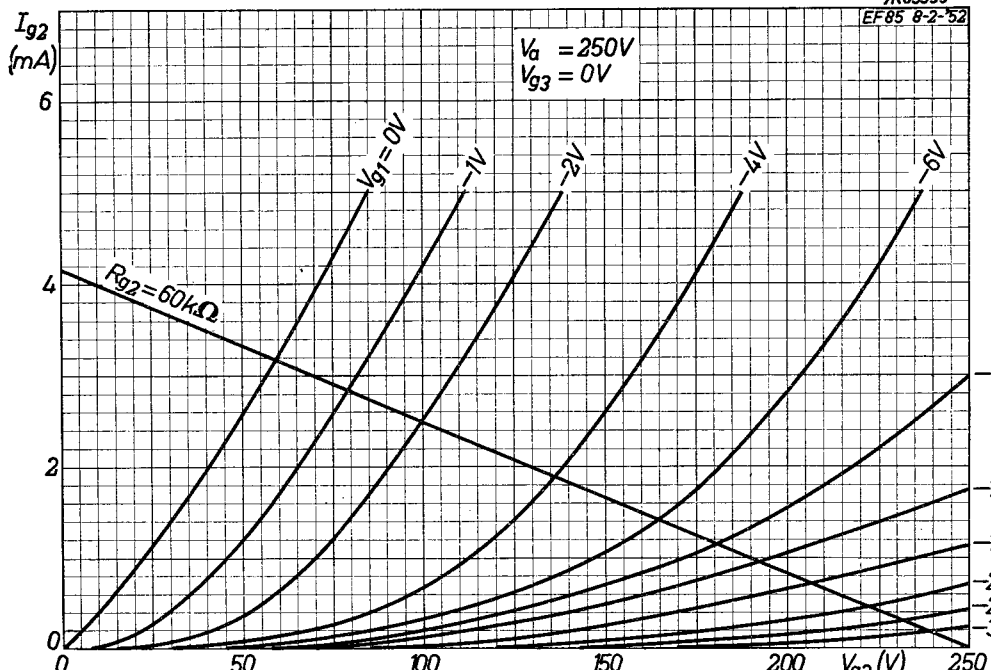
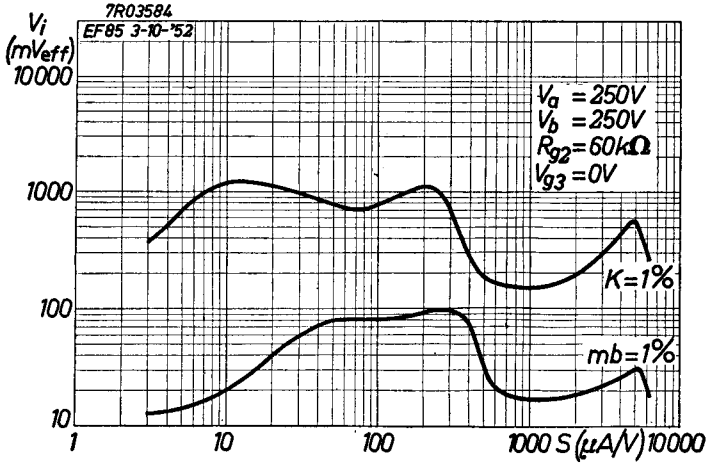
C


7R03399
EF85 8-2-52
I_{g2} (mA)
V_a = 250V
V_{g3} = 0V
V_{g1} = 0V
−1V
−2V
−4V
−6V
−8V
−10V
−15V
−20V
−25V
−30V
R_{g2} = 60kΩ
0
2
4
6
0
50
100
150
200
250
V_{g2} (V)

PHILIPS

EF 85



⟶ E

10.10.1957

PHILIPS

Electronic Tube

HANDBOOK

EF85

page	sheet	date
1	1	1955.06.06
2	2	1955.06.06
3	3	1954.11.11
4	A	1952.10.10
5	B	1952.10.10
6	C	1952.10.10
7	D	1952.10.10
8	E	1957.10.10
9	FP	1999.06.29