

HEPTODE for use as frequency changer in battery sets
 HEPTODE pour l'utilisation comme changeuse de fréquence dans des appareils batterie
 HEPTODE zur Verwendung als Mischröhre in Batteriegeräten

Heating: direct by battery current, rectified A.C. or D.C.; series or parallel supply

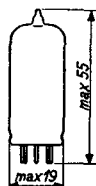
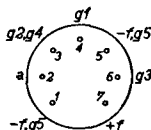
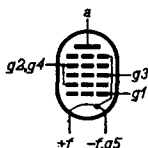
Chauffage: direct par courant batterie, C.A. redressé ou C.C.;

Heizung: direkt durch Batteriestrom, gleichgerichteten Wechselstrom oder Gleichstrom;
 Serien- oder Parallelspeisung

Parallel supply: $V_f = 1,4 \text{ V}$
 Alimentation en parallèle: $I_f = 0,050 \text{ A}$
 Parallelspeisung:

Series supply: $V_f = 1,35 \text{ V}$
 Alimentation en série:
 Serienspeisung:

Dimensions in mm
 Dimensions en mm
 Abmessungen in mm



Capacitances $C_a = 7,5 \text{ pF}$
 Capacités $C_{g3} = 7,0 \text{ pF}$
 Kapazitäten $C_{ag3} < 0,4 \text{ pF}$

$C_{g1} = 3,8 \text{ pF}$
 $C_{ag1} < 0,1 \text{ pF}$
 $C_{g1g3} < 0,2 \text{ pF}$

HEPTODE for use as frequency changer in battery receivers

HEPTHODE pour utilisation en changeuse de fréquence dans des appareils-batterie

HEPTODE zur Verwendung als Mischröhre in Batteriegeräten

Heating : direct by D.C.
series or parallel supply

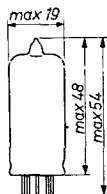
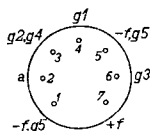
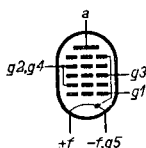
Chauffage: direct par C.C.
alimentation en série ou en parallèle

Heizung : direkt durch Gleichstrom
Serien- oder Parallelspeisung

Parallel supply $V_f = 1,4 \text{ V}$
Alimentation en parallèle $I_f = 50 \text{ mA}$
Parallelspeisung

Series supply $V_f = 1,3 \text{ V}$
Alimentation en série
Serienspeisung

Dimensions in mm
Dimensions en mm
Abmessungen in mm



Base, culot, Sockel: Miniature

Capacitances
Capacités
Kapazitäten

$C_a = 7,5 \text{ pF}$
 $C_{g3} = 7,0 \text{ pF}$
 $C_{ag3} < 0,4 \text{ pF}$
 $C_{g1} - 3,8 \text{ pF}$
 $C_{ag1} < 0,1 \text{ pF}$
 $C_{g1g3} < 0,2 \text{ pF}$

Operating characteristics
 Caractéristiques d'utilisation
 Betriebsdaten

$V_a=V_b$	=	45		90	V	
V_{g2+g4}	=	45		45	V	
R_{g1}	=	0,1		0,1	M Ω	
I_{g1}	=	150		150	μ A	
V_{g3}	=	0	-9	0	-9	V
I_a	=	0,7	-	0,8	-	mA
I_{g2+g4}	=	1,9	-	1,9	-	mA
Sc	=	235	5	250	5	μ A/V
R_i	=	0.6	>10	0,8	>10	M Ω

$V_a=V_b$	=	67,5		90	V	
V_{g2+g4}	=	67,5		67,5	V	
R_{g1}	=	0,1		0,1	M Ω	
I_{g1}	=	250		250	μ A	
V_{g3}	=	0	-14	0	-14	V
I_a	=	1,4	-	1,6	-	mA
I_{g2+g4}	=	3,2	-	3,2	-	mA
Sc	=	280	5	300	5	μ A/V
R_i	=	0,5	>10	0,6	>10	M Ω
R_{eq}	=	185	-	195	-	k Ω

Limiting values
 Caractéristiques limites
 Grenzdaten

V_a	= max.	90 V
W_a	= max.	0,15 W
V_{g2+g4}	= max.	67,5 V
W_{g2+g4}	= max.	0,25 W
I_k	= max.	5,5 mA
V_{g3} ($I_{g3} = +0,3 \mu$ A)	= max.	+0,2 V
R_{g3}	= max.	3 M Ω

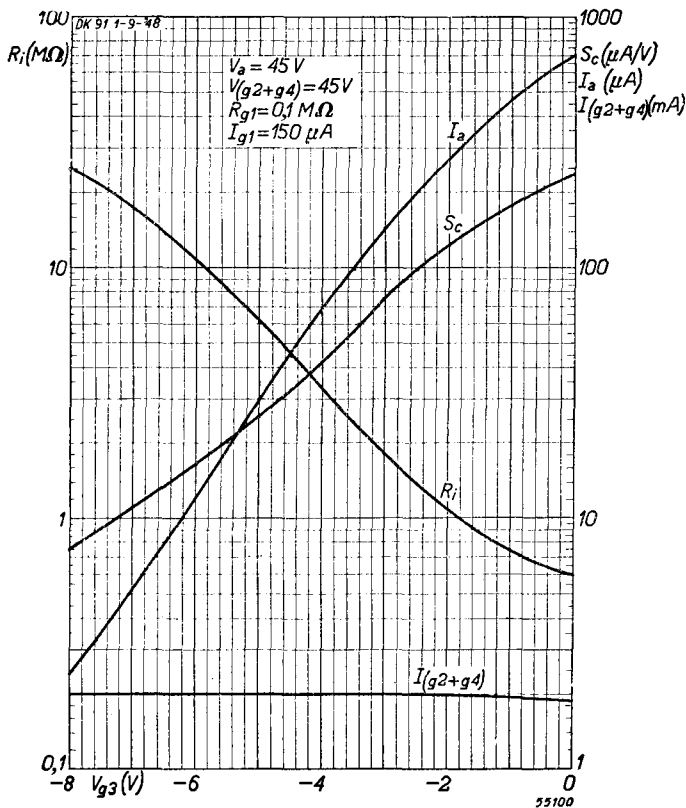
Operating characteristics
Caractéristiques d'utilisation
Betriebsdaten

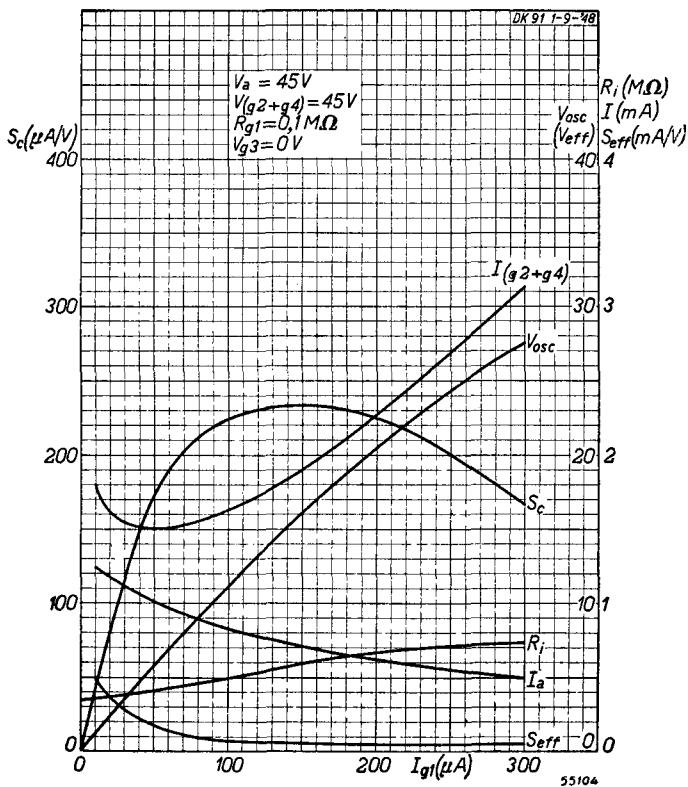
$V_a=V_b$	=	45		90	V
V_{g2+g4}	=	45		45	V
R_{g1}	=	0,1		0,1	MΩ
I_{g1}	=	150		150	μA
V_{g3}	=	$\overbrace{0 \quad -9}$		$\overbrace{0 \quad -9}$	V
I_a	=	0,7	-	0,8	- mA
I_{g2+g4}	=	1,9	-	1,9	- mA
S_c	=	235	5	250	5 μA/V
R_i	=	0,6	>10	0,8	>10 MΩ

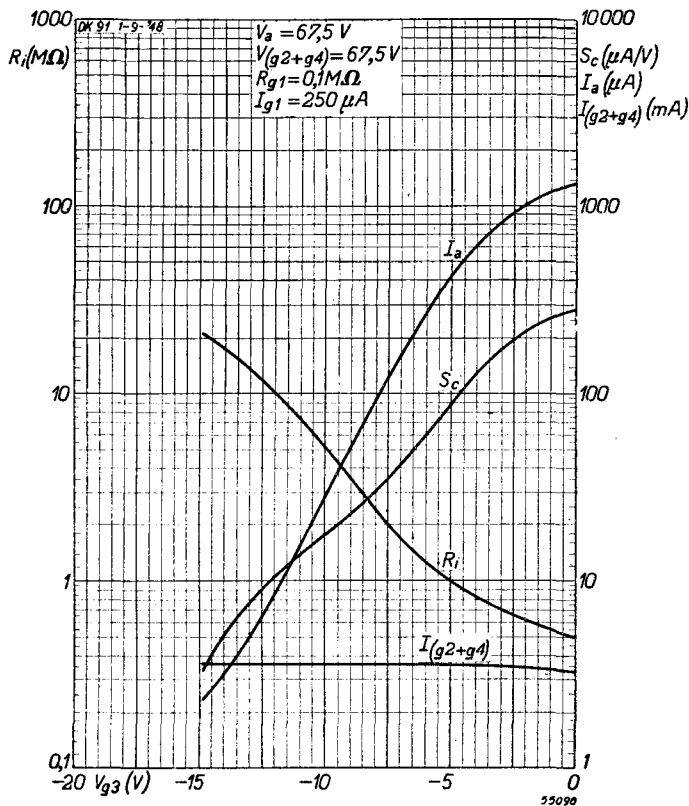
$V_a=V_b$	=	67,5		90	V	
V_{g2+g4}	=	67,5		67,5	V	
R_{g1}	=	0,1		0,1	MΩ	
I_{g1}	=	250		250	μA	
V_{g3}	=	0	-14	0	-14	V
I_a	=	1,4	-	1,6	-	mA
I_{g2+g4}	=	3,2	-	3,2	-	mA
S_c	=	280	5	300	5	μA/V
R_i	=	0,5	>10	0,6	>10	MΩ
R_{eq}	=	185	-	195	-	kΩ

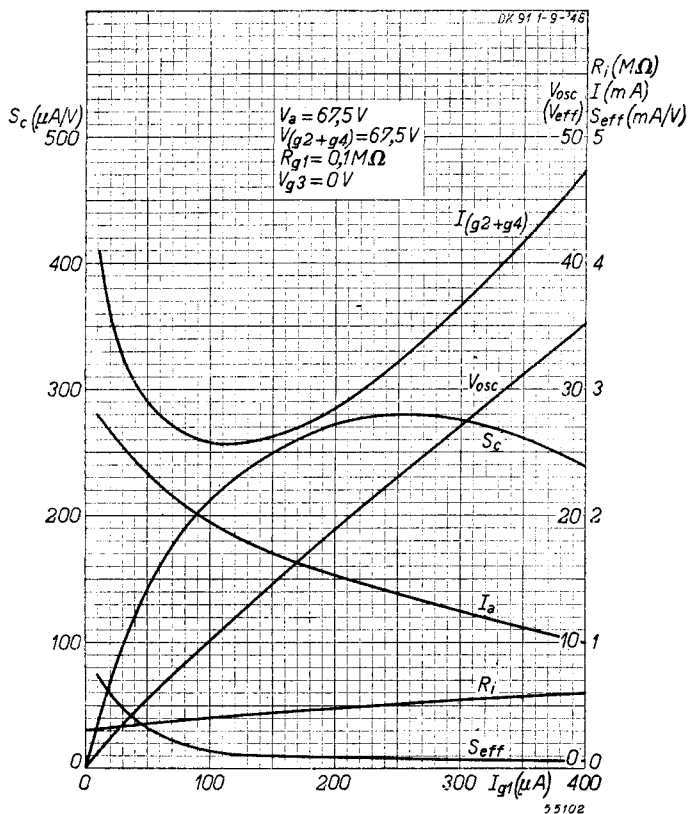
Limiting values
Caractéristiques limites
Grenzdaten

V_a	= max.	90	V
W_a	= max.	0,15	W
V_{g2+g4}	= max.	67,5	V
W_{g2+g4}	= max.	0,25	W
I_k	= max.	5,5	mA
V_{g3} ($I_{g3}=+0,3$ μA)	= max.	0,75	V
R_{g3}	= max.	3	MΩ
R_{g1}	= max.	0,15	MΩ



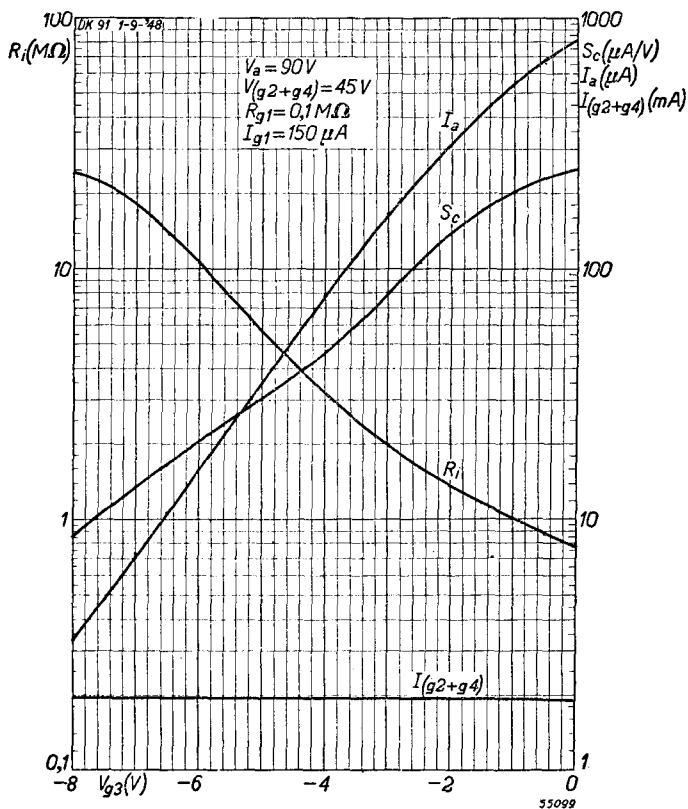
DK 91
PHILIPS

B

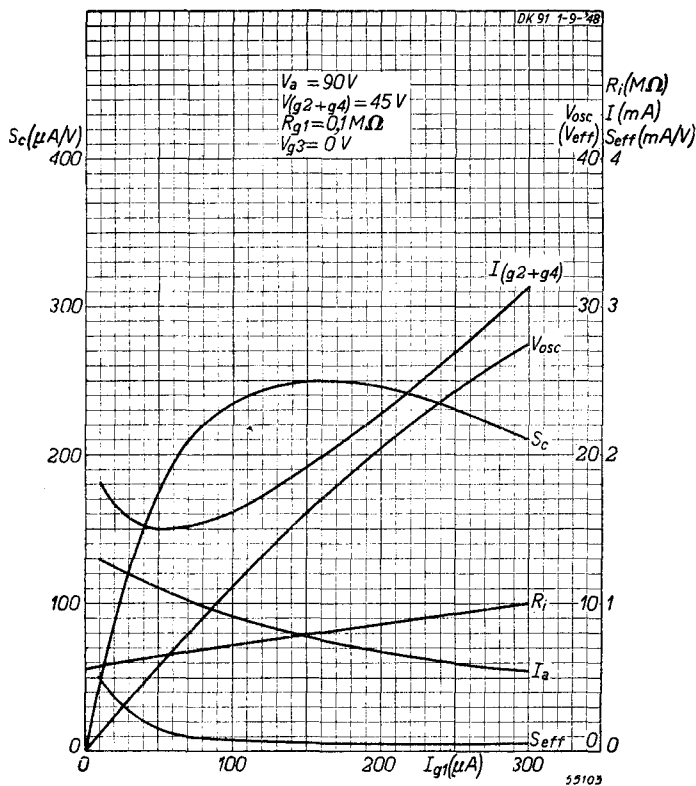


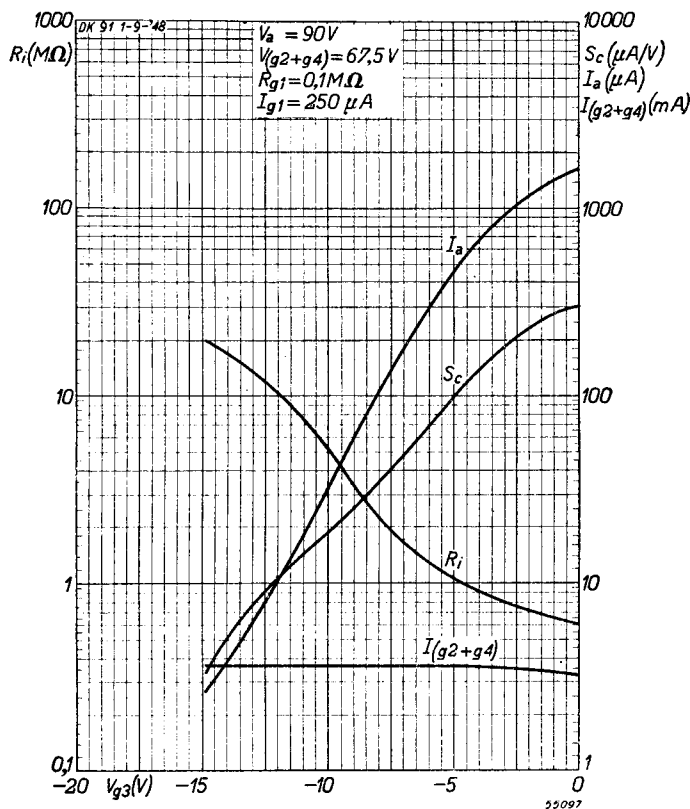
DK 91
PHILIPS


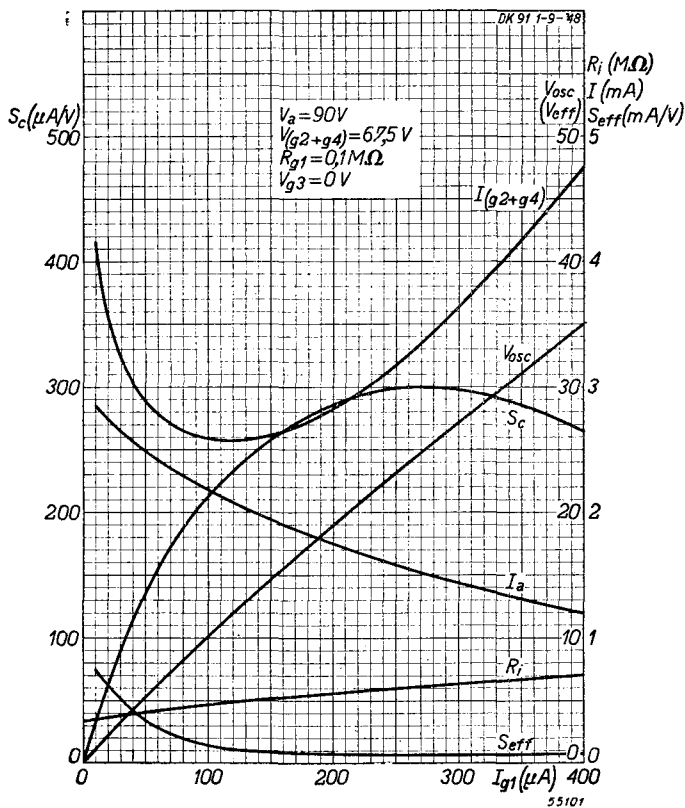
23.10.1948

D

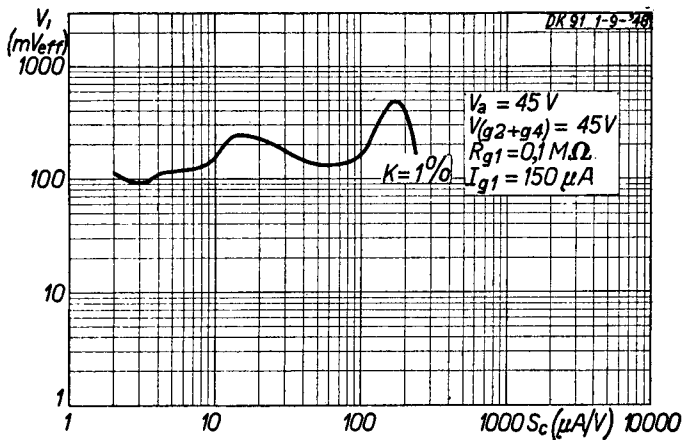


DK 91**PHILIPS**

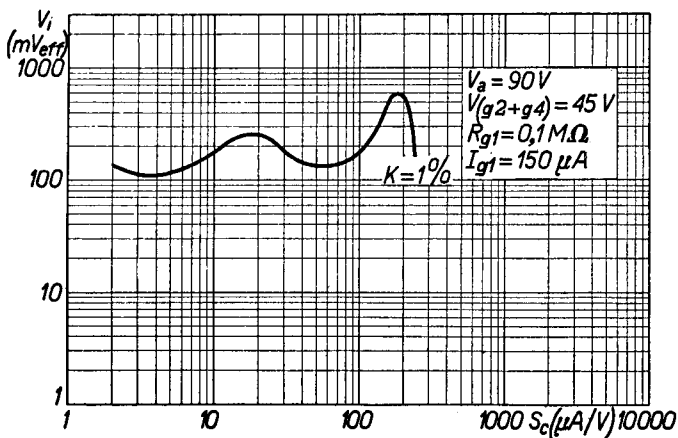


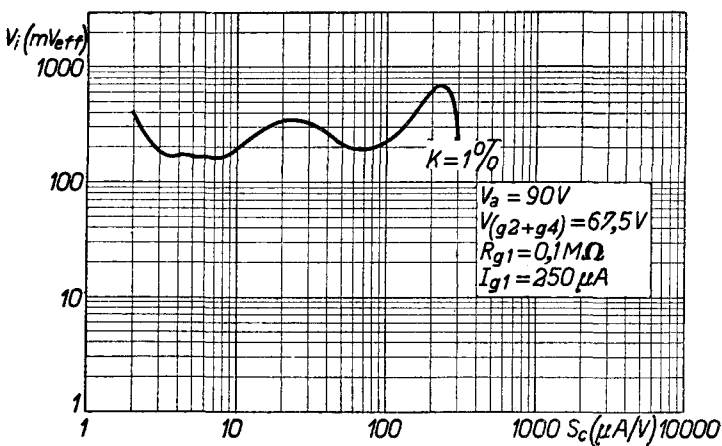
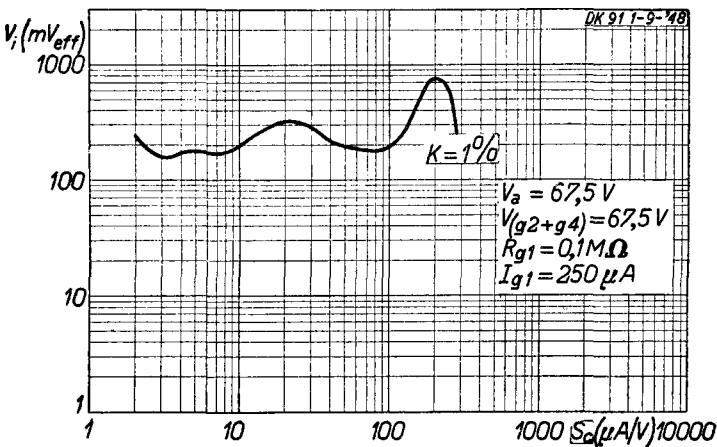
DK 91
PHILIPS


H



56375



DK 91**PHILIPS**

55096



	DK91	
page	sheet	date
1	1	1949.06.06
2	1	1953.11.11
3	2	1949.06.06
4	2	1953.11.11
5	A	1948.10.23
6	B	1948.10.23
7	C	1948.10.23
8	D	1948.10.23
9	E	1948.10.23
10	F	1948.10.23
11	G	1948.10.23
12	H	1948.10.23
13	I	1948.10.23
14	J	1948.10.23
15	FP	2000.01.21