

# "Miniwatt"

**AK 2**

**OCTODE** frequency converter for superheterodyne receivers  
**OCTODE** changeur de fréquence pour superhétérodes  
**OCTODE** mischroehre für Ueberlagerungsempfänger

Heating : Indirect ; A.C. ; parallel supply  
 Chauffage : Indirect ; courant alternatif ; alimentation en parallèle  $V_f = 4,0 \text{ V}$   
 $I_f = 0,65 \text{ A}$   
 Heizung : Indirekt ; Wechselstrom ; Parallelspeisung

Capacities	$C_{ag_1} < 0,06 \text{ pF}$	$C_a = 12,5 \text{ pF}$
Capacités	$C_{g_1} = 9,1 \text{ pF}$	$C_{g_1 g_4} < 0,35 \text{ pF}$
Kapazitäten	$C_{g_4} = 8,7 \text{ pF}$	$C_{g_1 g_4} < 0,25 \text{ pF}$
	$C_{g_2} = 6 \text{ pF}$	

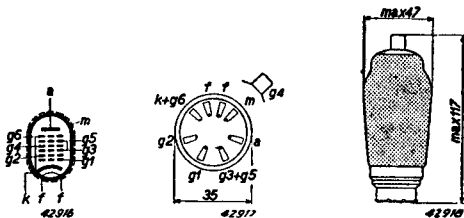
Operating characteristics  
 Caractéristiques de service  
 Betriebsdaten

$V_a$	=	250 V	$I_a$	=	1,6 mA
$V_{g_2}$	=	90 V	$I_{g_2}$	=	2,0 mA
$V_{(g_3 + g_5)}$	=	70 V	$I_{(g_3 + g_5)}$	=	3,8 mA
$V_{g_1} (I_{g_1} = 190 \mu A)$	=	-11 V	$Sc$	=	600 $< 2 \mu A/V$
$R_{g,k}$	=	50 $k\Omega$	$R_i$	=	1,6 $> 10 M\Omega$
$V_{g_4}$	=	-1,5 — 25 V			

Limiting values  
 Limites fixées pour l'utilisation  
 Grenzwerte

$V_{a0}$	= max.	550 V	$V_{(g_3 + g_5)}$	= max.	70 V
$V_a$	= max.	250 V	$W_{(g_3 + g_5)}$	= max.	0,5 W
$W_a$	= max.	0,5 W	$I_k$	= max.	10 mA
$V_{g_3 0}$	= max.	300 V	$R_{g,k}$	= max.	2,5 $M\Omega$
$V_{g_2}$	= max.	90 V	$R_{g,k}$	= max.	100 $000 \Omega$
$W_{g_2}$	= max.	0,3 W	$V_{fk}$	= max.	50 V
$V_{(g_3 + g_5)0}$	= max.	400 V	$R_{fk}$	= max.	5000 $\Omega$

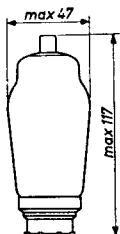
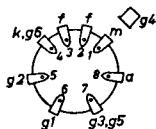
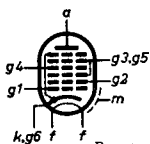
Electrode arrangement, base connections and max. dimensions in mm.  
 Disposition des électrodes, connexions du culot et dimensions max. en mm.  
 Elektrodenanordnung, Sockelanschlüsse und max. Abmessungen in mm.



OCTODE for use as frequency changer  
 OCTODE pour utilisation en changeuse de fréquence  
 OKTODE zur Verwendung als Mischröhre

Heating : indirect; parallel supply  $V_f = 4,0$  V  
 Chauffage: indirect; alimentation-parallèle  $I_f = 0,65$  A  
 Heizung : indirect; Parallelspeisung

Dimensions in mm  
 Dimensions en mm  
 Abmessungen in mm



Base, culot, Sockel: I

Operating characteristics  
 Caractéristiques d'utilisation  
 Betriebsdaten

$V_a$	=	250	V
$V_{g2}$	=	90	V
$V_{g3, g5}$	=	70	V
$R_{g1}$	=	50	k $\Omega$
$I_{g1}$	=	190	$\mu$ A
$V_{osc}$	=	8,5	$V_{eff}$
$V_{g4}$	=	-1,5	-25
$I_a$	=	1,6	mA
$I_{g2}$	=	2,0	mA
$I_{g3, g5}$	=	3,8	mA
$S_c$	=	600	<2 $\mu$ A/V
$R_1$	=	1,6	>10 M $\Omega$

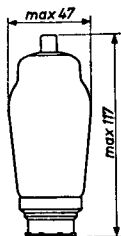
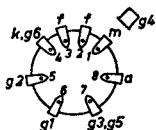
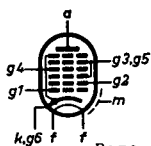
Limiting values  
 Caractéristiques limites  
 Grenzdaten

$V_{a0}$	= max.	550	V	$V_{g3, g5}$	= max.	70	V
$V_a$	= max.	250	V	$W_{g3, g5}$	= max.	0,5	W
$W_a$	= max.	0,5	W	$I_k$	= max.	10	mA
$V_{g20}$	= max.	300	V	$R_{g4}$	= max.	2,5	M $\Omega$
$V_{g2}$	= max.	90	V	$R_{g1}$	= max.	0,1	M $\Omega$
$W_{g2}$	= max.	0,3	W	$V_{kf}$	= max.	50	V
$V_{g3, g50}$	= max.	400	V	$R_{kf}$	= max.	5	k $\Omega$

OCTODE for use as frequency changer  
 OCTODE pour utilisation en changeuse de fréquence  
 OKTODE zur Verwendung als Mischröhre

Heating : indirect; parallel supply  $V_f = 4,0$  V  
 Chauffage: indirect; alimentation-parallèle  $I_f = 0,65$  A  
 Heizung : indirect; Parallelspeisung

Dimensions in mm  
 Dimensions en mm  
 Abmessungen in mm



Base, culot, Sockel: F

Operating characteristics  
 Caractéristiques d'utilisation  
 Betriebsdaten

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$V_{g2}$	=	90	V
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Limiting values  
 Caractéristiques limites  
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$V_a$	= max.	250	V	$W_{g3, g5}$	= max.	0,5	W
$W_a$	= max.	0,5	W	$I_k$	= max.	10	mA
$V_{g20}$	= max.	300	V	$R_{g4}$	= max.	2,5	M $\Omega$
$V_{g2}$	= max.	90	V	$R_{g1}$	= max.	0,1	M $\Omega$
$W_{g2}$	= max.	0,3	W	$V_{kf}$	= max.	50	V
$V_{g3, g50}$	= max.	400	V	$R_{kf}$	= max.	5	k $\Omega$

**PHILIPS**



*Electronic  
Tube*

**HANDBOOK**

<b>page</b>	<b>AK2 sheet</b>	<b>date</b>
1	1	1947.12.01
2	1	1953.12.12
3	2	1959.12.12
4	FP	1999.06.26