

DL 33

Output pentode

FILAMENT Suitable for D.C. operation only

- (a) Series : V_f applied across the two filament sections in series, between pins 2 and 7. V_{g1} referred to pin 7
- (b) Parallel : V_f applied across the two filament sections in parallel, between pin 8 and pins 2 and 7 connected together. V_{g1} referred to pin 8

	Series	Parallel	
V_f	2.8	1.4	V
I_f	0.05	0.1	A

OPERATING CONDITIONS

As Class "A" amplifier

Filament	Series			Parallel		
V_a	90	110	85	90	110	V
V_{g2}	90	110	85	90	110	V
V_{g1}	-4.5	-6.6	-5.0	-4.5	-6.6	V
$V_{in(r.m.s.)}$	3.2	3.6	3.5	3.2	3.8	V
I_a	8.0	8.5	7.0	9.5	10.0	mA
I_{g2}	1.0	1.1	0.8	1.3	1.4	mA
g_m	2.0	2.0	1.95	2.2	2.2	mA/V
r_a	80	110	70	90	100	K Ω
R_a	8	8	9	8	8	K Ω
P_{out}	230	330	250	270	400	mW
D_{tot}	8.5	8.5	5.5	6.0	6.0	%

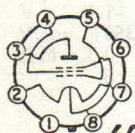
LIMITING VALUES

Filament	Series	Parallel	
V_a max.	110	110	V
V_{g2} max.	110	110	V
$I_{k(o)}$ max.	6*	12	mA
R_{g1-f} max.	1.0	1.0	M Ω

*For each 1.4 V section

BASE : **DIMENSIONS:**

Octal $L = 100$ mm
 $D = 30$ mm



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DL 35

Output pentode

FILAMENT Suitable for D.C. operation only

V_f 1.4 V I_f 0.1 A

OPERATING CONDITIONS

As Class "A" amplifier

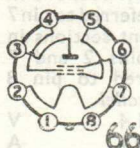
V_a	83	90	V
V_{g2}	83	90	V
V_{g1}	-7.0	-7.5	V
$V_{in(r.m.s.)}$	5.0	5.3	V
I_a (max. sig.)	7.3	7.8	mA
$I_{a(o)}$	7.0	7.5	mA
I_{g2} (max. sig.)	3.5	3.5	mA
$I_{g2(o)}$	1.6	1.6	mA
r_a (approx.)	110	115	K Ω
g_m	1.5	1.55	mA/V
R_a	9	8	K Ω
P_{out} ($D_{tot} = 10\%$)	200	240	mW



4 VALVE DATA PREFERRED TYPES E OUTPUT PENTODES

DL 35 LIMITING VALUES

(contd.)



V_a max.	110	V
V_{g2} max.	110	V
I_k max.	12	mA

BASE :
Octal

DIMENSIONS :

L=92 mm
D=30 mm

DL 66 Sub-miniature output pentode for use in hearing aids

FILAMENT

V_f 1.25 V I_f 15mA Suitable for D.C. operation only

Direct soldered connections to the leads of this valve must be at least 5 mm from the seal and any bending of the valve leads must be at least 1.5 mm from the seal

CAPACITANCES

C_{a-g1}	<0.2	$\mu\mu\text{F}$
C_{in}	2.5	$\mu\mu\text{F}$
C_{out}	3.7	$\mu\mu\text{F}$

CHARACTERISTICS

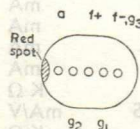
V_a	22.5	V
V_{g2}	22.5	V
I_a	300	μA
I_{g2}	75	μA
V_{g1}	-1.4	V
g_m	350	$\mu\text{A/V}$
r_a	0.3	M Ω
μ_{g1-g2}	8	

OPERATING CONDITIONS

As single valve Class "A" amplifier (screen fed direct from H.T. line)

V_b	22.5	V
V_{g2}	22.5	V
V_{g1}	-1.4	V
R_a	75	K Ω
$I_a(o)$	300	μA
$I_{g2(o)}$	75	μA
$V_{1u(r,m,s.)}$	0.85	V
P_{out}	2.7	mW
D_{tot}	10	%

LIMITING VALUES



V_a max.	45	V
V_{g2} max.	45	V
I_k max.	1.0	mA

BASE:
Wired in
B5A

DIMENSIONS:

L=35 mm+32 mm leads
D=6.1x8.4 mm

