

VALVE DATA 4 PREFERRED TYPES OUTPUT PENTODES E

OPERATING CONDITIONS AS TRIODE (contd.)

As triode connected push-pull pair (self bias)

V_b	350	435	V
V_a	320	400	V
I_a (o)	2×56	2×70	mA
I_a (max. sig.)	2×64	2×80	mA
P_a	2×18	2×28	W
R_k	245	245	Ω
R_{a-a}	4	4	K Ω
V_{in} (r, m, s.)	2×21.5	2×27.2	V
P_{out}	12.5	20.6	W
D_{tot}	4.1	4.3	%

EL 37
(contd.)

LIMITING VALUES

$V_{a(b)}$ max.	800	V
V_a max.	400	V
$V_{g2(b)}$ max.	800	V
V_{g2} max.	400	V
V_{h-k} max.	75	V
R_{g1-k} max. (cathode bias)	0.5	M Ω
R_{g1-k} max. (fixed bias)	0.1	M Ω
p_a max.	25	W
p_{g2} max.	6	W
I_k max.	200	mA



BASE :
Octal

DIMENSIONS :
L=131 mm
D=54 mm

Output pentode, for use as line time base output valve in A.C. television receivers. Type EL 38M is metallised

EL 38
EL 38M

HEATER

V_h 6.3 V I_h 1.4 A Suitable for A.C. mains operation

CAPACITANCES

	EL 38M	EL 38	
C_{in}	18	18	$\mu\mu F$
C_{out}	9.5	6.5	$\mu\mu F$
C_{a-g1}	<1.0	<1.2	$\mu\mu F$

CHARACTERISTICS

V_a	275	V
V_{g2}	275	V
I_a	91	mA
I_{g2}	11	mA
V_{g1}	-9	V
g_m	14	mA/V
μ_{g1-g2}	16.5	
r_a	20	K Ω



4 VALVE DATA PREFERRED TYPES E OUTPUT PENTODES

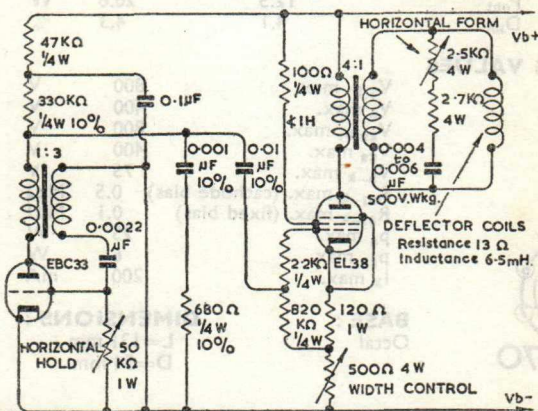
EL 38 EL 38M (contd.)

OPERATING CONDITIONS

As line time base output valve (see Fig. 1, below)

For EL 38	V_b	300	V
	I_a	64	mA
	I_{g2}	18	mA
	R_k	120	Ω
For EBC 33	I_a	0.8	mA

N.B.—Above values measured under synchronised conditions



All capacitors rated at 350V.wkg. and 20% tolerance unless otherwise stated.

All resistors of 20% tolerance unless otherwise stated.

Fig. 1.—Line time base circuit.

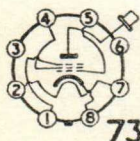
NOTES:

- (1) The deflector coils should be capable of providing full scan for MW22-17 ($V_a=7KV$) with a peak to peak current swing of 500mA.
- (2) Synchronising pulses may be applied negatively to the anode or positively to the grid of the EBC 33.
- (3) The decoupling components (47KΩ and 0.1μF) in the anode circuit of the EBC 33 are necessary only if there is ripple on the H.T. line.
- (4) All potentiometers should be linear components to provide smooth control.

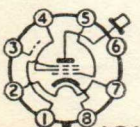
LIMITING VALUES

EL 38
BASE:
Octal

V_a max.	800	V
V_a (pk) max.	8	KV
V_{g2} max.	400	V
p_a max.	25	W
p_{g2} max.	8	W
I_k max.	200	mA
R_{g1-k} ($p_a < 25$ W) max.	0.5	MΩ
R_{g1-k} ($p_a < 9$ W) max.	0.8	MΩ
V_{h-k} max.	100	V



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EL 38M
BASE:
Octal

101

DIMENSIONS:

L=141 mm
D=45.5 mm

