

# DOUBLE DIODE TRIODE

# EBC33

Medium gain triode for use as A.F. voltage amplifier  
and combined with twin diodes.

## HEATER

This valve is suitable for DC/AC operation.

$V_h$	6.3	V
$I_h$	0.2	A

## CAPACITANCES

$C_{ad'-k}$	2.6	$\mu\mu\text{F}$
$C_{ad''-k}$	3.2	$\mu\mu\text{F}$
$C_{ad'-ad''}$	< 0.7	$\mu\mu\text{F}$
$C_{ad'-g}$	< 0.001	$\mu\mu\text{F}$
$C_{ad''-g}$	< 0.005	$\mu\mu\text{F}$

## CHARACTERISTICS

$V_a$	100	200	250	V
$I_a$	2	4	5	mA
$V_g$	-2.1	-4.3	-5.5	V
$\mu$	30	30	30	
$g_m$	1.6	2.0	2.0	mA/V
$r_a$	19	15	15	k $\Omega$

## OPERATING CONDITIONS AS RESISTANCE-COUPLED A.F. AMPLIFIER

$V_h$ (V)	$R_a$ (k $\Omega$ )	$I_a$ (mA)	$R_k$ (k $\Omega$ )	$\frac{V_{out}}{V_{in}}$	$V_{out}^*$ (V)	$D_{tot}$ (%)	$R_{g1}^{**}$ (k $\Omega$ )
300	47	2.8	1.2	19.5	45	5.8	150
250	47	2.3	1.2	19.0	34	5.5	150
200	47	1.8	1.2	18.5	26	5.2	150
100	47	0.5	4.7	13.0	8	10.0	150
300	100	1.5	2.2	22.0	49	5.2	330
250	100	1.27	2.2	22.0	41	5.2	330
200	100	1.0	2.2	21.5	31	5.0	330
100	100	0.32	6.8	16.5	14	10.0	330
300	220	0.83	3.9	23.5	52	4.8	680
250	220	0.69	3.9	23.5	41	4.6	680
200	220	0.53	3.9	23.0	31	4.5	680
100	220	0.2	10	19.0	20	10.0	680

\* $V_{out}$  < Output voltage at start of  $I_g$  or  $D_{tot} = 10\%$ .

\*\* $R_{g1}$  = Grid resistance of following valve.

## LIMITING VALUES

$V_{a(b)}$ max.	550	V
$V_b$ max.	300	V
$p_a$ max.	1.5	W
$V_{ad}$ max.	200	V
$I_{ad}$ max.	0.8	mA
$I_k$ max.	10	mA
$V_g$ max. ( $I_g = 0.3\mu\text{A}$ )	-1.3	V
$R_g$ max. (Self bias)	3.0	M $\Omega$
$R_g$ max. (Fixed bias)	1.0	M $\Omega$
$V_{h-k}$ max.	150	V
$R_{h-k}$ max.	20	k $\Omega$



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