

SPECIAL QUALITY DOUBLE TRIODE

E92CC

Special quality double triode for use in computers where stability of characteristics and long life are required.

This data should be read in conjunction with GENERAL NOTES - SPECIAL QUALITY VALVES, which precede this section of the handbook, and the index numbers are used to indicate where reference should be made to a specific note.

HEATER

Suitable for parallel operation a.c. or d.c.

V_h^1	6.3	V
I_h	400	mA

The maximum variation of heater current at $V_h = 6.3V$ is $\pm 20mA$

MOUNTING POSITION

Any

CAPACITANCES³

	Average	Minimum	Maximum	
$C_{a''-g''}$	2.2	1.8	2.6	pF
* C_{in}	3.1	2.2	4.0	pF
$C_{out''}$	0.32	0.22	0.42	pF
$C_{a'-g'}$	2.1	1.7	2.5	pF
$C_{out'}$	0.38	0.28	0.48	pF
$C_{a'-g''}$	—	—	2.0	pF
$C_{g'-g''}$	—	—	0.29	pF

*Each section

CHARACTERISTICS³ (each section)

V_a	150	V
I_a	8.5	mA
V_g	-1.7	V
g_m	6.0	mA/V
r_a	7.5	k Ω
μ	45	
R_k	0	Ω

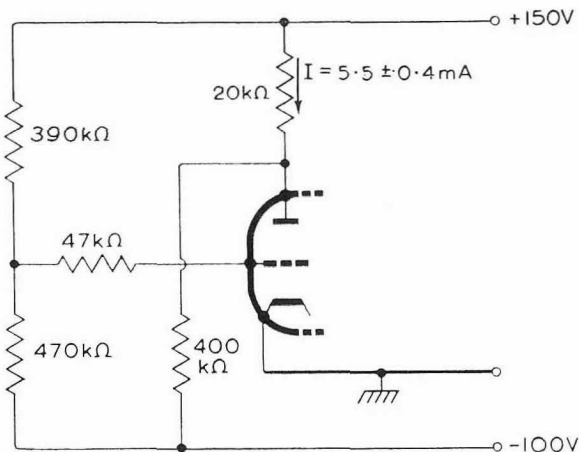


Fig.1

CHARACTERISTIC RANGE VALUES FOR EQUIPMENT DESIGN

	Average	Initial range	End of life*	
I_a ($V_a = 150V$, $V_g = -1.7V$)	8.5	4.5 to 12.5	—	mA
g_m ($V_a - k = 150V$, $R_k = 200\Omega$)	6.0	4.5 to 7.5	—	mA/V
I_a ($V_b = 150V$, $V_g = -10V$, $R_a = 20k\Omega$, $R_g = 47k\Omega$)	—	<100	100	μA
$V_{g'} \sim V_{g''}$ ($V_b = 150V$, $I_a = 100\mu A$, $R_a = 20k\Omega$, $R_g = 47k\Omega$)	—	<2.0	2.0	V
$-I_g$ ($V_a = 150V$, $V_g = -1.7V$)	—	<0.2	1.0	μA

INSULATION

	Initial range	End of life*	
Leakage current. Measured at V_{h-k} = 100V (cathode positive), $R_{lim} = 1.0M\Omega$	<15	30	μA
Insulation between any two arbitrary electrodes	>100	20	$M\Omega$

*To allow for valve deterioration during life, circuits should be designed to function with a valve in which one or more of the characteristics have changed to the end of life values.

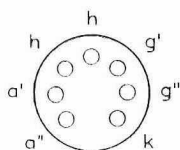
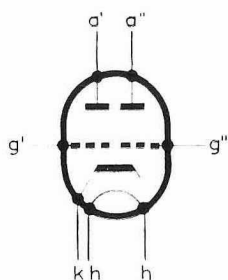
LIMITING VALUES[†] (absolute ratings) each section

$V_{a(b)}$ max.	600	V
V_a max.	300	V
p_a max.	2.0	W
$+V_g$ max.	500	mV
$-V_g$ max.	100	V
$\dagger -V_{g(pk)}$ max.	200	V
I_k max.	15	mA
$\dagger I_{k(pk)}$ max.	75	mA
I_g max.	250	μA
$\dagger I_{g(pk)}$ max.	1.0	mA
R_{g-k} max. (self bias)	1.0	$M\Omega$
R_{g-k} max. (fixed bias)	500	$k\Omega$
V_{h-k} max.	100	V
T_{pub} max.	170	$^{\circ}C$

[†]Maximum duration = 10ms

OPERATING NOTE

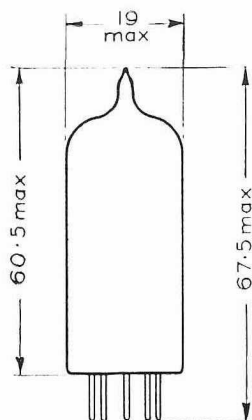
The E92CC will maintain its emission capabilities after long periods of operation under cut-off conditions. It is not intended to be used in circuits critical with regard to hum, microphony or noise.



B7G Base

5770

All dimensions in mm



The bulb and base dimensions of this valve are in accordance with BS448, Section B7G.

