

V.H.F. DOUBLE TRIODE

ECC189

Variable- μ , low noise v.h.f. frame grid double triode with high mutual conductance for use as a cascode amplifier.

HEATER

V_h	6.3	V
I_h	365	mA

CAPACITANCES

	Shielded	Unshielded
$C_{a'-a''}$	< 15	< 45 mpF
$C_{g'-a''}$	< 4.0	< 4.0 mpF

Grounded cathode section

$C_{a'-g'}$	1.9	1.9 pF
$C_{g'-k'+h+s}$	3.5	3.5 pF
$C_{a'-k'+h+s}$	2.3	1.7 pF
$C_{g'-h}$	< 280	< 280 mpF

Grounded grid section

$C_{a''-g''}$	1.9	1.9 pF
$C_{k''-g''+h+s}$	6.0	6.0 pF
$C_{a''-g''+h+s}$	4.0	3.4 pF
$C_{k''-h}$	3.0	3.0 pF
$C_{a''-k''}$	170	180 mpF

CHARACTERISTICS (each section)

V_a	90	V
V_g	-1.4	V
I_a	15	mA
g_m	12.5	mA/V
r_a	2.5	k Ω
μ	34	
V_g (for 20 : 1 reduction in g_m)	-5.0	V
V_g (for 100 : 1 reduction in g_m)	-9.0	V

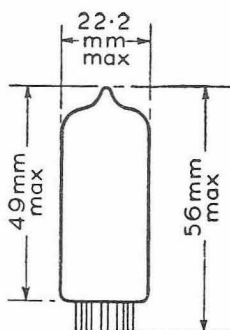
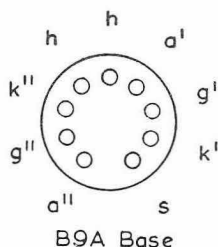
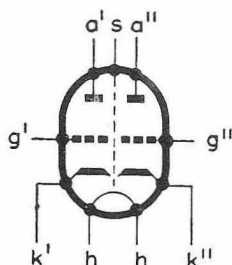
DESIGN CENTRE RATINGS (each section)

$V_{a(b)}$ max.	550	V
V_a max.	130	V
p_a max.	1.8	W
I_k max.	22	mA
$-V_g$ max.	50	V
$R_{g'-k}$ max.	1.0	M Ω
$R_{g''-k}$ max.	500	k Ω
$V_{h-k'}$ max.	50	V
$V_{h-k''}$ max. (cathode positive)	150	V
R_{h-k} max.	20	k Ω

NOTE

In order not to exceed the maximum permissible anode voltage when the cascode amplifier is controlled, it is necessary to use a voltage divider for the grid of the grounded grid section.

5242



The triode on pins 6, 7, 8, should have the grounded cathode connection and that on pins 1, 2, 3, should have the grounded grid connection.