

HEPTODE FREQUENCY CHANGER

DK96

FILAMENT

| | | |
|-------|-----|----|
| V_f | 1.4 | V |
| I_f | 25 | mA |

CAPACITANCES

| | | |
|--------------|------|-----|
| C_{a-a11} | 8.4 | pF |
| C_{g1-a11} | 3.9 | pF |
| C_{g2-a11} | 4.8 | pF |
| C_{g3-a11} | 7.4 | pF |
| C_{a-g1} | <110 | mpF |
| C_{a-g2} | <300 | mpF |
| C_{a-g3} | <360 | mpF |
| C_{g1-g2} | 3.0 | pF |
| C_{g1-g3} | <200 | mpF |
| C_{g2-g3} | 1.6 | pF |

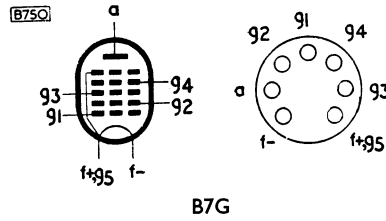
LIMITING VALUES

| | | |
|-----------------|-----|------------|
| V_a max. | 90 | V |
| P_a max. | 150 | mW |
| V_{g2} max. | 60 | V |
| P_{g2} max. | 100 | mW |
| V_{g4} max. | 90 | V |
| P_{g4} max. | 30 | mW |
| I_k max. | 2.6 | mA |
| R_{g3-f} max. | 3.0 | M Ω |
| R_{g1-f} max. | 100 | k Ω |

CHARACTERISTICS

Oscillator section
(With g_1 returned to f_+)

| | | | |
|---------------|------|------|-----------|
| $V_a = V_b$ | 64 | 85 | V |
| V_{g4} | 64 | 64 | V |
| V_{g3} | 0 | 0 | V |
| V_{g2} | 35 | 35 | V |
| V_{g1} | +1.4 | +1.4 | V |
| I_{g2} | 1.7 | 1.7 | mA |
| $g_m(g1-g2)$ | 600 | 600 | $\mu A/V$ |
| μ_{g1-g2} | 7.5 | 7.5 | |



DIMENSIONS

| | | |
|---------------------|----|----|
| Max. overall length | 56 | mm |
| Max. seated height | 50 | mm |
| Max. diameter | 19 | mm |

OPERATING CONDITIONS

| | | | |
|--------------------|------|------|------------|
| * $V_a = V_b$ | 64 | 85 | V |
| V_{g3} | 0 | 0 | V |
| R_{g4} | 0 | 120 | k Ω |
| R_{g2} | 18 | 33 | k Ω |
| R_{g1-f+} | 27 | 27 | k Ω |
| V_{g4} (approx.) | 64 | 68 | V |
| V_{g2} (approx.) | 35 | 35 | V |
| V_{ose} | 4.0 | 4.0 | V |
| I_k | 2.45 | 2.4 | mA |
| I_a | 550 | 600 | μA |
| I_{g4} | 120 | 140 | μA |
| I_{g2} | 1.6 | 1.5 | mA |
| I_{g1} | 85 | 85 | μA |
| g_e | 275 | 300 | $\mu A/V$ |
| r_a | 750 | 800 | k Ω |
| † V_{g3} | -4.5 | -6.5 | V |

*Based on line voltages of 67.5V and 90V decreased by the negative bias for the output valve.

†For 100:1 reduction in g_e .

REPLACEMENT FOR: X25, 1A6, 1C3.

