

SUBMINIATURE A.F. VOLTAGE AMPLIFYING PENTODE

DF64

Subminiature voltage amplifying pentode suitable for use in hearing aids. It has a filament current of 10mA and is primarily intended for use with an h.t. battery supply of 15volts.

FILAMENT

V_f	0.62	V
I_f	10	mA

MOUNTING POSITION

Any

Note.—Direct soldered connections to the leads of this valve must be at least 5mm from the seal and any bending of the valve leads must be at least 1.5mm from the seal.

CAPACITANCES (measured without external shield)

C_{a-g1}	<0.2	pF
C_{in}	1.8	pF
C_{out}	2.0	pF

CHARACTERISTICS

V_a	15	V
V_{g2}	15	V
I_a	50	μA
V_{g1}	-0.75	V
I_{g2}	17	μA
g_m	90	$\mu A/V$
r_a	1.2	M Ω
μ_{g1-g2}	7.5	

OPERATING CONDITIONS AS RESISTANCE COUPLED A.F. AMPLIFIER (see circuit for component references)

With fixed bias

V_b	15	V
R_a	2.2	M Ω
R_{g2}	2.7	M Ω
V_{g1}	-0.62	V
I_k	6.6	μA
Gain	27.4	dB
R_{out}	5.0	M Ω

With grid current biasing (zero source impedance)

V_b	15	V
R_a	2.2	M Ω
R_{g2}	4.7	M Ω
R_{g1}	10	M Ω
I_k	5.9	μA
Gain	28	dB
R_{out}	5.0	M Ω

LIMITING VALUES

V_a max.	45	V
V_{g2} max.	45	V
I_k max.	75	μA

DF64

SUBMINIATURE A.F. VOLTAGE AMPLIFYING PENTODE

Subminiature voltage amplifying pentode suitable for use in hearing aids. It has a filament current of 10mA and is primarily intended for use with an h.t. battery supply of 15volts.

