



# OUTPUT PENTODE

# N17

JULY, 1956

## DESCRIPTION

Type N17 is a miniature output pentode fitted with a centre-tapped filament for series or parallel operation. The valve is interchangeable with the American type 3S4.

## RATINGS

	Series	Parallel	
Filament Voltage ... ..	2.8	1.4	volts
Filament Current ... ..	0.05	0.10	approx. amp
Anode Voltage ... ..	90	90	max. volts
Screen Voltage ... ..	67.5	67.5	max. volts
Cathode Current, no load† ... ..	4.5	4.5	max. mA
Cathode Current, full load† ... ..	5.5	5.5	max. mA
Mutual Conductance* ... ..	1.425	1.575	mA/V

\* measured at  $V_a = 90$ ;  $V_{g_2} = 67.5$ ;  $V_{g_1} = -7$ .

† for each 1.4v. filament section.

## Capacitances (taken on valve with external screening) :

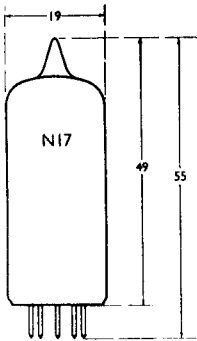
Control Grid to all other electrodes ... ..	5.2	approx. pF
Anode to all other electrodes ... ..	4.6	" "
Anode to Control Grid ... ..	0.35	" "

## OPERATING CONDITIONS

### Class A Amplifier

	Series		Parallel		
Anode Voltage ... ..	90	67.5	90	67.5	volts
Anode Current, no load ... ..	6.1	6.0	7.4	7.2	mA
Screen Voltage ... ..	67.5	67.5	67.5	67.5	volts
Screen Current, no load ... ..	1.1	1.2	1.4	1.5	mA
Control Grid Voltage ... ..	-7	-7	-7	-7	volts
Input Signal Voltage ... ..	7	7	7	7	peak volts
Anode Load Resistance ... ..	8,000	5,000	8,000	5,000	ohms
Distortion ... ..	13	12	12	10	%
Power Output ... ..	235	160	270	180	mW

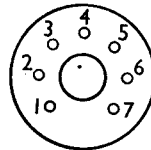
## DIMENSIONS



All dimensions are in mm and are the maximum except where otherwise stated.

## BASE

### B7G



View looking on underside of base

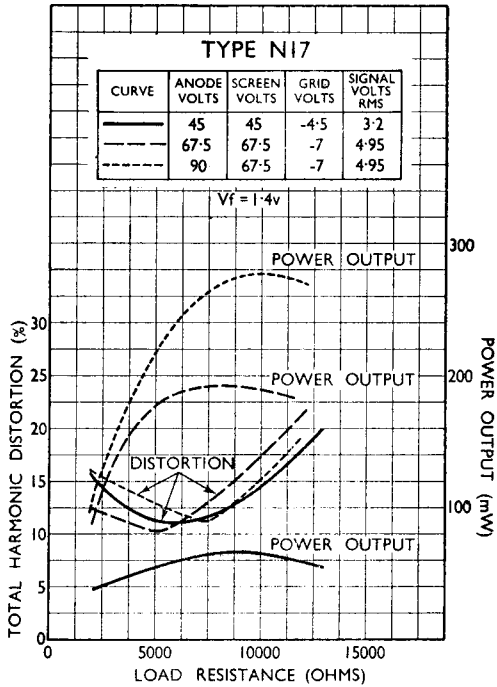
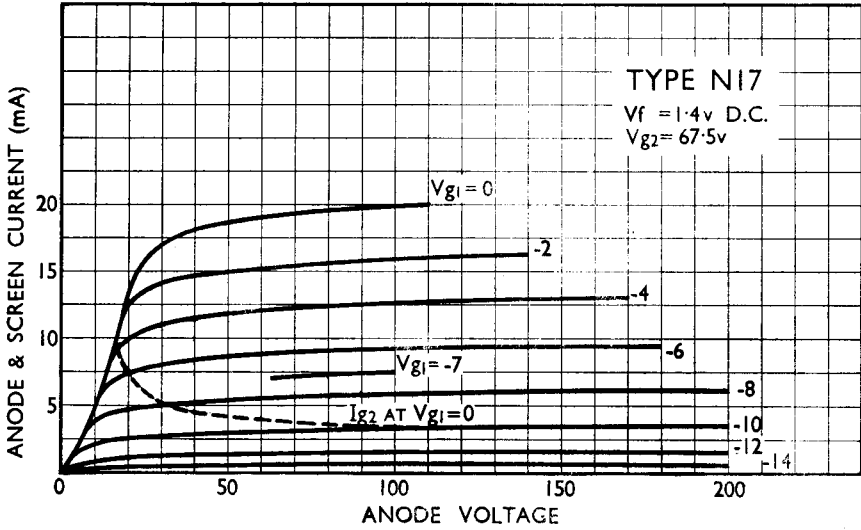
- Pin 1 : Filament (-series)
- 2 : Anode
- 3 : Control Grid,  $g_1$
- 4 : Screen Grid,  $g_2$
- 5 : Filament (-parallel)
- 6 : Anode
- 7 : Filament (+)

For parallel operation use pins 1 and 7 strapped, and 5.

For series operation use pins 1 and 7 only.

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CHARACTERISTIC CURVES OF AVERAGE VALVE.