



ELECTRONIC TUBE REFERENCE

3W4

Power - Pentode Single (NOT beam) (under 10W) electronic tube

CONSOLIDATED TECHNICAL
DATA

1 SECTION
CONSTRUCTION
PENTODE

3W4/354-SF directly heated miniature battery audio output pentode with series/parallel 2.8 V 25 mA or 1.4 V 50 mA filament and typical 0.25 W audio output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7BA	BASE PINS	7
NOMINAL HEATER	2.8 V / 25 mA	PARALLEL HEATER	1.4 V / 50 mA
HEATING	Direct	SERIES OPERATION	Capable
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

7BA - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – F	–	F – Filament	CONNECTED
PIN2 – P	A	P – Plate (Anode)	CONNECTED
PIN3 – G1	A	G1 – Control Grid	CONNECTED
PIN4 – G2	A	G2 – Screen Grid	CONNECTED
PIN5 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN5 – FCT	–	FCT – Filament Center Tap	CONNECTED
PIN6 – P	A	P – Plate (Anode)	CONNECTED
PIN7 – F	–	F – Filament	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	150000 Ω
TRANSCONDUCTANCE	0.0017 S
MAXIMUM PLATE VOLTAGE	90 V
MAXIMUM SCREEN VOLTAGE	90 V
MAXIMUM CATHODE CURRENT	11 mA
<i>3W4/354-SF battery audio output pentode, design-center maximum plate voltage 90 V (first-page OCR may read 80 V, verify scan), screen grid 90 V, cathode current 11 mA. Typical V_a 85 V, V_{g2} 85 V, V_{g1} -5.2 V, r_p ~150 kΩ, g_m 1700 μmhos = 0.0017 A/V, zero-signal I_a 6.8 mA, I_{g2} 1.4 mA, load 11 kΩ, peak AF signal 5.2 V, audio output 0.25 W, THD 12%. Directly heated coated center-tapped filament, 2.8 V 25 mA series or 1.4 V 50 mA parallel. Grid3 tied to negative filament on pin1.</i>	

TUBE TINKER

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