

ELECTRONIC TUBE REFERENCE

12AX7LP

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Sovtek 12AX7LP high-mu dual triode with 6.3/12.6 V selectable heater, nominal amplification factor 94 and 330 V maximum plate voltage, designed for linear audio amplification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9A	BASE PINS	9
NOMINAL HEATER	12.6 V / –	PARALLEL HEATER	6.3 V / –
HEATING	Indirect	SERIES OPERATION	Capable
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

9A - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – 2P	B	P – Plate (Anode)	CONNECTED
PIN2 – 2G1	B	G1 – Control Grid	CONNECTED
PIN3 – 2K	B	K – Cathode	CONNECTED
PIN4 – H	–	H – Heater	CONNECTED
PIN5 – H	–	H – Heater	CONNECTED
PIN6 – 1P	A	P – Plate (Anode)	CONNECTED
PIN7 – 1G1	A	G1 – Control Grid	CONNECTED
PIN8 – 1K	A	K – Cathode	CONNECTED
PIN9 – HCT	–	HCT – Heater Center Tap	CONNECTED

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	56000 Ω
TRANSCONDUCTANCE	0.0017 S
AMPLIFICATION FACTOR	94
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	1.2 W
<i>Sovtek 12AX7LP triode 1. Nominal μ 94, gm 0.0017 A/V, rp 56000 Ω; max plate 330 V, dissipation 1.2 W, plate current 9 mA. Nominal grid-plate capacitance 1.7 pF, grid-to-cathode/heater 1.6 pF, plate-to-cathode/heater 0.46 pF, cathode-heater 5 pF; manufacturer prints plate-to-plate 600 pF (unusually high; verify). Maximum heater-cathode ± 200 V, fixed-bias grid resistor 1 MΩ, self-bias 2.2 MΩ. Test at heater 12.6 V, plate 250 V, grid -2 V: minimum gm 0.0014 A/V, μ 78, plate current 0.75 mA, grid reverse current max 0.2 μA.</i>	

SECTION2 Triode	
PLATE RESISTANCE	56000 Ω
TRANSCONDUCTANCE	0.0017 S
AMPLIFICATION FACTOR	94
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	1.2 W
<i>Sovtek 12AX7LP triode 2. Nominal μ 94, gm 0.0017 A/V, rp 56000 Ω; max plate 330 V, dissipation 1.2 W, plate current 9 mA. Nominal grid-plate capacitance 1.7 pF, grid-to-cathode/heater 1.6 pF, plate-to-cathode/heater 0.38 pF, cathode-heater 5 pF; manufacturer prints plate-to-plate 600 pF (unusually high; verify). Maximum heater-cathode ± 200 V, fixed-bias grid resistor 1 MΩ, self-bias 2.2 MΩ. Test at heater 12.6 V, plate 250 V, grid -2 V: minimum gm 0.0014 A/V, μ 78, plate current 0.75 mA, grid reverse current max 0.2 μA.</i>	