



ELECTRONIC TUBE REFERENCE

12AT6AETC

Voltage - Triode (with diode, heptode or hexode) electronic tube

CONSOLIDATED TECHNICAL
DATA

3 SECTIONS

CONSTRUCTION

DIODE-DIODE-TRIODE

Controlled-warm-up 150 mA series-string diode-triode variant in the 12AT6A receiving family, intended for detector and voltage-amplifier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	12.6 V / 150 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Capable
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	54000 Ω
TRANSCONDUCTANCE	0.0013 S
AMPLIFICATION FACTOR	70
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	0.5 W
<i>Sylvania 12AT6A controlled-warm-up 150 mA series heater equivalent to 12AT6 apart from heater warmup, approximately 17 s by manufacturer's defined test. One triode and two physical detector diodes share a common cathode. Triode max anode 300 V and plate dissipation 0.5 W. Typical at V_a 100 V and V_g -1 V: gm 1.3 mA/V, amplification factor 70, plate resistance 54 kΩ. The 12AT6 reference is the basis for section ratings.</i>	

SECTION2 Diode	
MAXIMUM CATHODE CURRENT	1 mA
<i>First physical detector diode of Sylvania 12AT6A controlled-warm-up double-diode triode, sharing cathode with the triode and second diode. Per-diode maximum current 1 mA from 12AT6 electrically equivalent reference. The 2 mA measurement at 10 V applied is a test characteristic rather than rated maximum. 12.6 V 150 mA series heater; approximately 17-second warmup.</i>	

SECTION3 Diode	
MAXIMUM CATHODE CURRENT	1 mA
<i>Second physical detector diode of 12AT6A, corrected from Rectifier section classification to Diode. Sylvania identifies 12AT6A as electrically equivalent to double-diode triode 12AT6 except controlled 17-second heater warmup. Per diode max 1 mA current; 2 mA at 10 V is a characteristic test. Cathode is common to both diodes and triode; 12.6 V, 150 mA series-heater service.</i>	

Sylvania advance-data sheet listing controlled-heater-warm-up versions of several 150 mA series-string receiving tubes, including 12AT6A, 12AU6A, 12AV6A, 12BA6GA, 12BE6A, and related types.

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