

ELECTRONIC TUBE REFERENCE

6AR8

Specialized - Switching Tube electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMSWITCHINGCOMMUTATOR

Double-plate sheet-beam switching and detector tube that steers an electron beam between output plates for electronic commutation and signal detection.

GENERAL CHARACTERISTICS

BASE DESIGNATION	90P	BASE PINS	9
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 BeamSwitchingCommutator	
TRANSCONDUCTANCE	0.004 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	30 mA
Promoted from published ratings/characteristics; identical repeated sections compressed where applicable.	

6AR8 is described in the supplied Tung-Sol datasheet as a double-plate sheet-beam switching/detector tube. Published maximum ratings and core section characteristics were extracted into the technical tables.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X General Electric Essential Characteristics

Published test conditions and operating points. Values on this page are preserved as reported by this source.

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · BeamSwitchingCommutator

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ColorTV SynchronousDetector
Screen voltage	250 V	ColorTV SynchronousDetector
Plate current	10 mA	ColorTV SynchronousDetector
Screen current	0.4 mA	ColorTV SynchronousDetector

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Tung Sol

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1961 TUNG SOL

Section 1 · BeamSwitchingCommutator

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	300 mA	—
Accelerator voltage	200 V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Deflecting switching voltage	20 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate 1 to plate 2	0.4 pF	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 1 of 4

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

Section 1 · BeamSwitchingCommutator

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published table
Heater current	300 mA	Published table
Grid-1 transconductance	11000 μ S	DeflectorsGrounded
Deflector switching voltage maximum	20 V	Switching

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate 1 maximum voltage	300 V	SheetBeam
Plate 2 maximum voltage	300 V	SheetBeam
Accelerator maximum voltage	300 V	SheetBeam
Maximum deflector voltage	150 V	EachPolarity
Maximum cathode current	30 mA	SheetBeam
Plate 1 voltage	250 V	DeflectorsGrounded
Plate 2/accelerator voltage	290 V	DeflectorsGrounded
Total plate current	10 mA	DeflectorsGrounded



SOURCE DATA APPENDIX

1968 General Electric Co

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1968 GENERAL ELECTRIC CO

Section 1 · BeamSwitchingCommutator

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Number 2 Maximum Voltage	300 V	SheetBeam
Plate Number 2 Maximum Dissipation	2 W	SheetBeam

TUBE TINKER

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