ELECTRONIC TUBE REFERENCE

7645

Voltage - Dual Tetrode electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
TETRODE-TETRODE

> Miniature frame-grid twin tetrode designed for compact RF power equipment, with useful output and full-input operation extending to approximately 400 MHz.

General characteristics

BASE DESIGNATION	_	**BASE PINS**	_
NOMINAL HEATER	6.3 V / 600 mA	**PARALLEL HEATER**	_ / _
HEATING	Indirect	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

Section ratings

SECTION1 Tetrode

AMPLIFICATION FACTOR	31
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	200 V
MAXIMUM PLATE DISSIPATION	5.5 W
MAXIMUM SCREEN DISSIPATION	1.5 W
MAXIMUM GRID DISSIPATION	0.12 W
MAXIMUM CATHODE CURRENT	40 mA

Published ratings/characteristics promoted from the source; representative section used for repeated identical systems where applicable.

SECTION2 Tetrode

AMPLIFICATION FACTOR	31
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	200 V
MAXIMUM PLATE DISSIPATION	5.5 W
MAXIMUM SCREEN DISSIPATION	1.5 W
MAXIMUM GRID DISSIPATION	0.12 W
MAXIMUM CATHODE CURRENT	40 mA

Second physical tetrode section; electrically identical twin section.

7645 is a DualTetrode device in the supplied Amperex literature. Miniature frame-grid twin tetrode, a reduced-height version of the 6939 for compact equipment.

SOURCE OPERATING CONDITIONS

1953 Amperex

SOURCE PDF

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

1953 AMPEREX

Section 1 · Tetrode

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Maximum Plate Voltage	**250 V**	—
Maximum Screen Voltage	**200 V**	—
Maximum Plate Dissipation	**3.5 W**	—
Maximum Screen Dissipation	**1.5 W**	—
Maximum Grid Dissipation	**0.12 W**	—
Maximum Cathode Current	**40 mA**	—

SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

1963 Amperex Condensed

SOURCE PDF

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

1963 AMPEREX CONDENSED

Section 1 · Tetrode

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Maximum plate dissipation CCS	**5.5 W**	PerSection
Maximum plate dissipation ICAS	**7 W**	PerSection
Plate voltage	**180 V**	RFPower
Plate current	**40 mA**	RFPower; PerSection
RF output power	**4.2 W**	RFPower

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid voltage	**-20 V**	RFPower
Grid current	**0.6 mA**	RFPower
Screen voltage	**180 V**	RFPower
Maximum frequency at full input rating	**400 MHz**	—

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	**0.15 pF**	—
Input capacitance	**6.4 pF**	—
Output capacitance	**1.6 pF**	—

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