

ELECTRONIC TUBE REFERENCE

CK510AX

Voltage Pentode or Tetrode (under 100V) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TETRODE-TETRODE

Directly heated subminiature double space-charge tetrode designed for cascaded audio-frequency voltage-amplifier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7D	BASE PINS	7
NOMINAL HEATER	0.625 V / 50 mA	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

7D - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – IS	A	IS – Internal Screen	CONNECTED
PIN2 – H	–	H – Heater	CONNECTED
PIN3 – 2P	B	P – Plate (Anode)	CONNECTED
PIN4 – 2K	B	K – Cathode	CONNECTED
PIN5 – 1P	A	P – Plate (Anode)	CONNECTED
PIN7 – H	–	H – Heater	CONNECTED
PIN8 – 1K	A	K – Cathode	CONNECTED

SECTION RATINGS

SECTION1 Tetrode	
TRANSCONDUCTANCE	0.000065 S
MAXIMUM PLATE VOLTAGE	22.5 V
MAXIMUM CATHODE CURRENT	0.5 mA
<i>Published values are typical summary-table operating/characteristic data, not maximum ratings. Representative row for the two tetrode sections.</i>	

SECTION2 Tetrode	
TRANSCONDUCTANCE	0.000065 S
MAXIMUM PLATE VOLTAGE	22.5 V
MAXIMUM CATHODE CURRENT	0.5 mA
<i>Second physical tetrode restored under one-row-per-physical-section policy.</i>	

Directly heated subminiature double space-charge tetrode for cascaded audio-frequency amplifier service.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1938 Raytheon

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

1938 RAYTHEON

Section 1 · Tetrode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	0.78 V	Nominal
HeaterCurrentNominal	120 mA	Nominal
Maximum Plate Voltage	22.5 V	—
Maximum Cathode Current	0.5 mA	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	120 μ S	Typical



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X Raytheon Special Purpose Tubes

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

195X RAYTHEON SPECIAL PURPOSE TUBES

Section 1 · Tetrode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	45 V	Typical operating point; Voltage Amp.
Grid 1 Voltage	0 V	Typical operating point; Voltage Amp.
Plate Current	0.06 mA	Typical operating point; Voltage Amp.
Output Power	150 mW	Typical operating point; Voltage Amp.
Maximum Length	1.25 in	Maximum dimension

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Width	0.4 in	Maximum dimension
Maximum Thickness	0.285 in	Maximum dimension