



Excellence in Electronics

**TYPE
CK6397**

The CK6397 is a filament type RF Power Pentode of subminiature construction designed for use as an intermittent duty cycle Class A or Class C amplifier such as in portable transceiver equipment or as a frequency doubler at output frequencies in the VHF Range. It is designed for dependable operation under conditions of shock and vibration usually found in mobile and aircraft applications. The flexible terminal leads may be soldered or welded directly to the terminals of circuit components without the use of sockets. Standard 8-pin subminiature sockets may be used by cutting the leads to a suitable length.

MECHANICAL DATA

ENVELOPE: T-3 Glass

BASE: Subminiature Button 8-Pin (0.017" tinned flexible leads.
Length: 1.25" min.)

TERMINAL CONNECTIONS:

- | | |
|------------------------------------------------------|---------------------------|
| Lead 1 Filament, negative | Lead 6 Grid #2 |
| Lead 2 No Connection | Lead 7 Filament, positive |
| Lead 3 Plate | Lead 8 Grid #1 |
| Lead 4 No Connection | |
| Lead 5 Filament center-tap,
Grid #3, (F+parallel) | |

MOUNTING POSITION: Any

ELECTRICAL DATA

DIRECT INTERELECTRODE CAPACITANCES: (μfda)

	Unshielded	Shielded
Grid to Plate: (g1 to p)	0.06	0.055 max.
Input: g1 to (F+g2+g3)	2.6	2.75
Output: p to (F+g2+g3)	2.15	3.0

RATINGS - ABSOLUTE MAXIMUM VALUES:

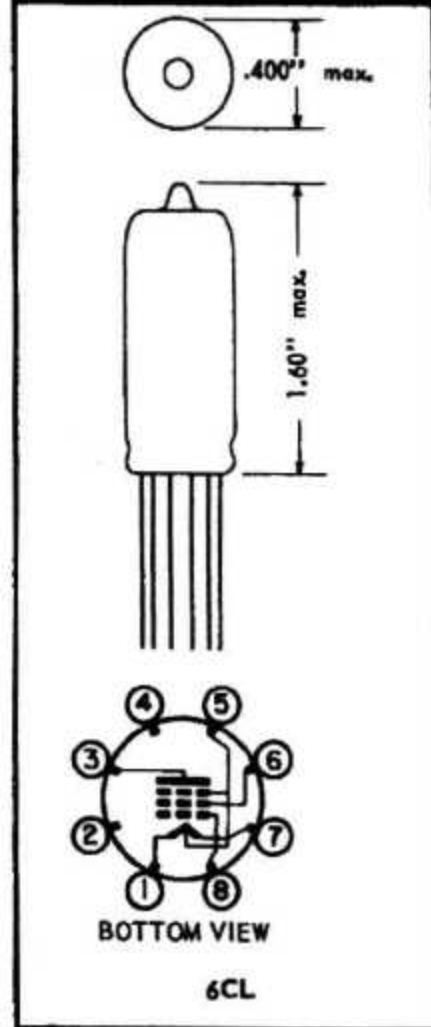
Filament Voltage (dc)	1.25/2.5 \pm 12%	volts
Plate Voltage	135	volts
Grid #2 Voltage	135	volts
Grid #1 Voltage	100	volts
Plate Dissipation	1.5	watts
Grid #2 Dissipation	0.6	watt
Cathode Current	14	ma.
Grid #1 Current	0.375	ma.
Altitude	60,000	feet
Impact	500	g

CHARACTERISTICS AND TYPICAL OPERATION - CLASS A AMPLIFIER:

Filament Voltage	1.25/2.5	volts
Filament Current	125/62.5	ma.
Plate Voltage	125	volts
Grid #2 Voltage	125	volts
Grid #1 Voltage	-7.5	volts
Plate Current	7.25	ma.
Grid #2 Current	1.2	ma.
Transconductance	1950	μmhos

CHARACTERISTICS AND TYPICAL OPERATION - FREQUENCY DOUBLER:

Filament Voltage (dc)	1.25	1.25	volts
Filament Current	125	125	ma.
DC Plate Voltage	120	120	volts
DC Grid #2 Voltage	120	120	volts
Grid Bias Resistance	0.27	0.22	meg.
Peak RF Grid Drive Voltage	65	80	volts
Plate Current	6.5	7.5	ma.
Grid #2 Current	2.0	2.50	ma.
Grid #1 Current (approx.)	220	325	μa .
Useful Power Output	115	140	mw.
Output Frequency	125	250	Mc.



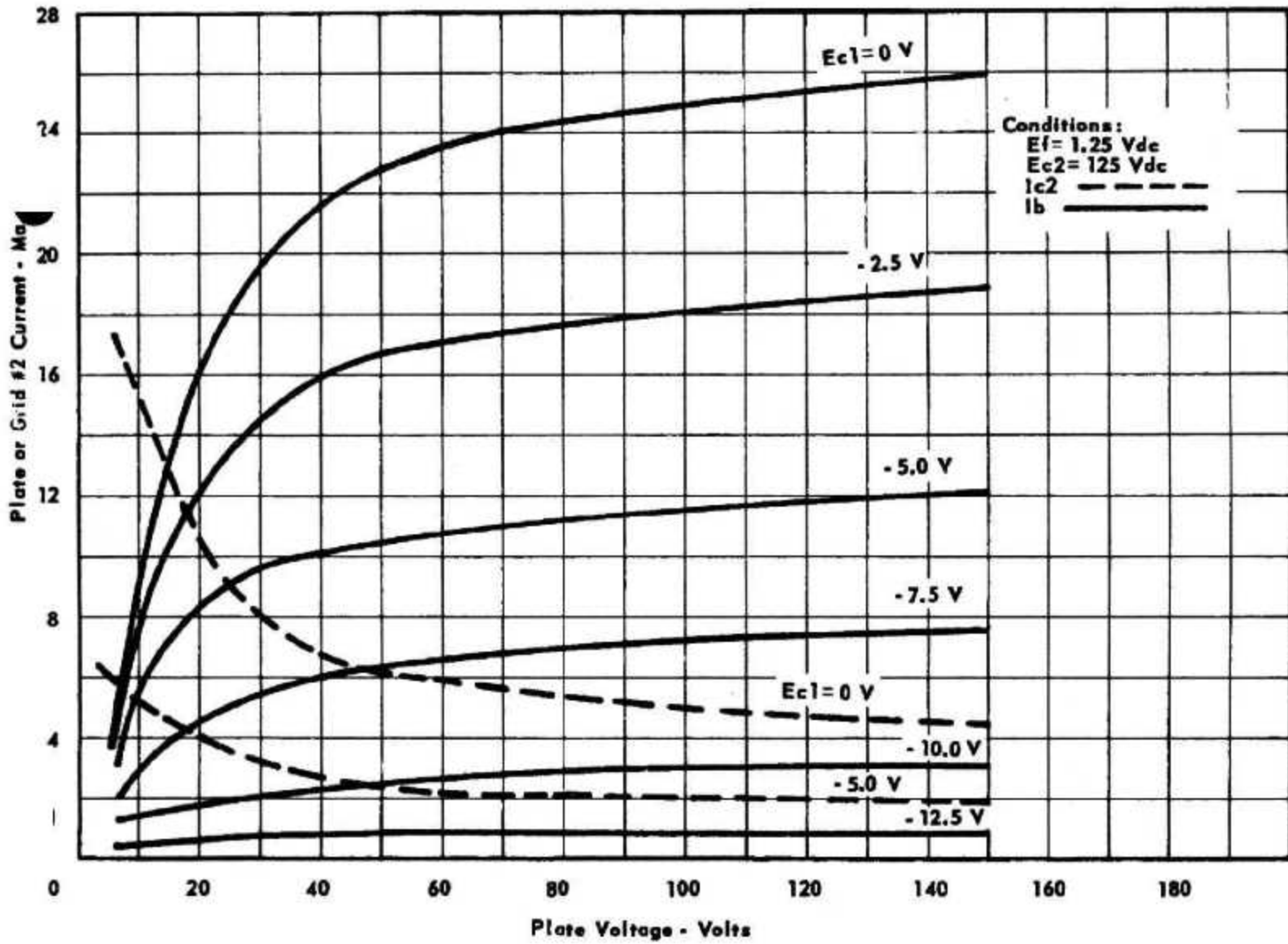
Tentative Data

RAYTHEON MANUFACTURING COMPANY
RECEIVING AND CATHODE RAY TUBE OPERATIONS



SUBMINIATURE POWER PENTODE

AVERAGE PLATE CHARACTERISTICS



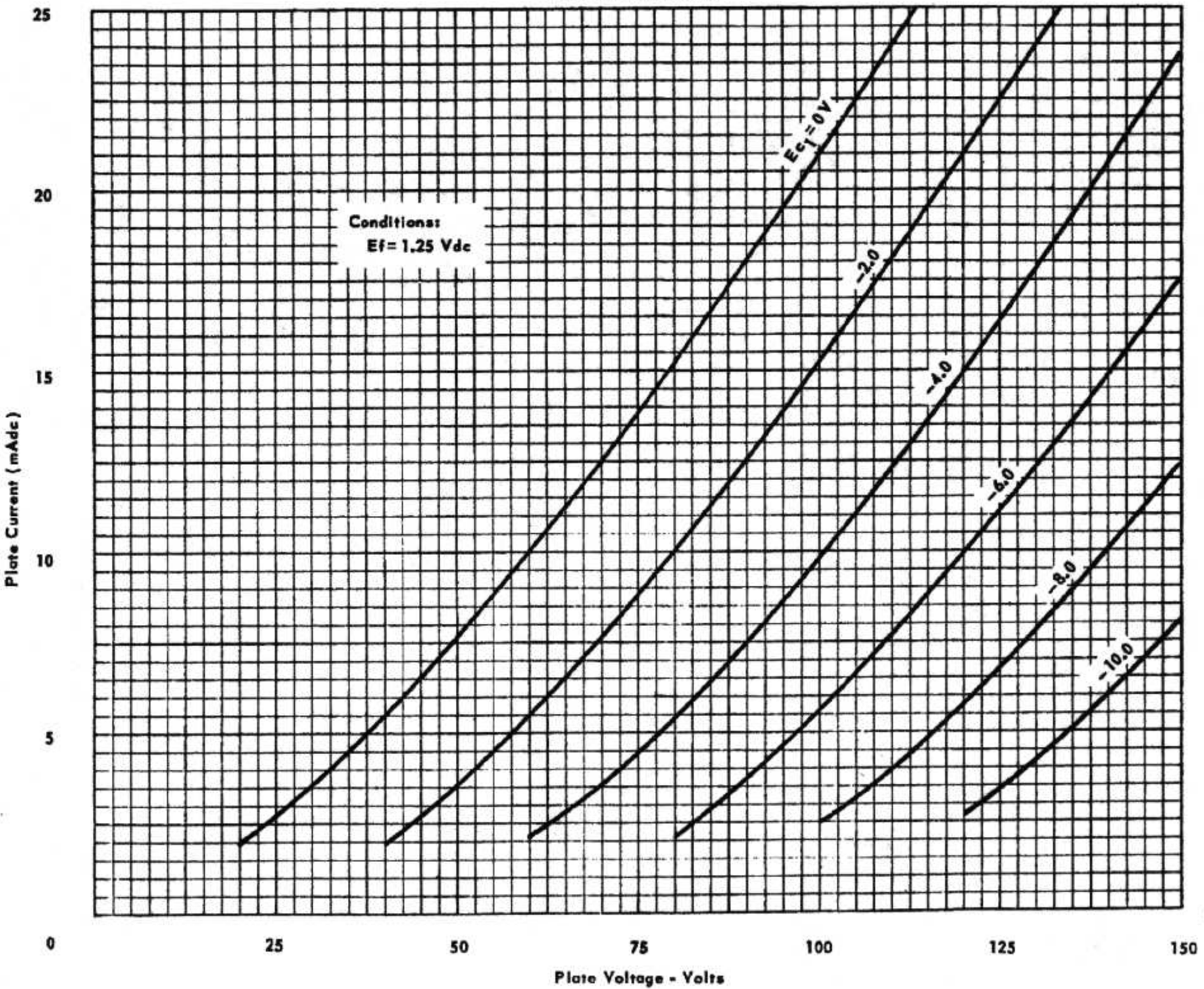
RAYTHEON MANUFACTURING COMPANY

RECEIVING AND CATHODE RAY TUBE OPERATIONS



SUBMINIATURE POWER PENTODE

AVERAGE PLATE CHARACTERISTICS
(Triode Connected)



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RECEIVING AND CATHODE RAY TUBE OPERATIONS

October 1, 1956

NEWTON 58, MASS.

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