from JEDEC release #3813, July 16, 1962

RAYTHEON

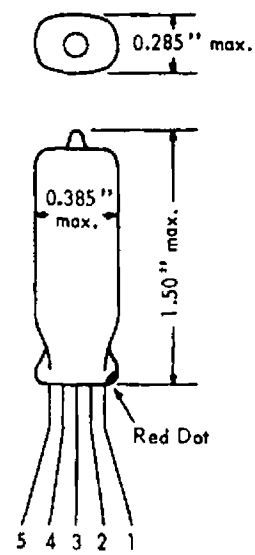
TECHNICAL INFORMATION

Excellence in Electronics

SUBMINIATURE PENTODE

TYPE CK6051

The CK6051 is a filament type subminiature power amplifier pentode, suitable for intermittent service applications such as "push-to-talk" transmitters which do not require long life characteristics. It is designed for use in portable or wearable communications equipment for Class C service. The flexible terminal leads may be soldered or welded directly to the terminals of circuit components without the use of sockets. Standard inline subminiature sockets may be used by cutting the leads to a suitable length.



MECHANICAL DATA

ENVELOPE: T2X3 Glass

BASE: None (0.016" tinned flexible leads. Length: 1.5" min. Spacing: 0.048" center-to-center.)

TERMINAL CONNECTIONS: *(Red Dot is Adjacent to Lead 1)*

Lead 1 Plate	Lead 4 Grid #1
Lead 2 Grid #2	Lead 5 Filament, Positive Grid #3 ▲
Lead 3 Filament, Negative Grid #3 ▲	

MOUNTING POSITION: Any

ELECTRICAL DATA

DIRECT INTERELECTRODE CAPACITANCES: (μμfds)

Grid to Plate: (g1 to p)	0.25	max.
Input: g to (f+g2+g3)	3.65	
Output: p to (f+g2+g3)	3.0	

RATINGS – DESIGN MAXIMUM VALUES:

Filament Voltage (dc)	1.25 ± 10%	volts
Plate Voltage	67.5	volts
Grid #2 Voltage	67.5	volts
Cathode Current	9.5	mA
Plate Dissipation	0.37	watt
Grid #2 Dissipation	0.11	watt

CHARACTERISTICS AND TYPICAL OPERATION – CLASS A1 AMPLIFIER:

Filament Voltage a	1.25	volts
Filament Current	100	mA
Plate Voltage	45	volts
Grid #2 Voltage	45	volts
Grid #1 Voltage	–4.0	volts
Plate Current	4.0	ma
Grid #2 Current	1.1	ma
Transconductance	1350	μmhos
Plate Resistance (approx.)	35000	ohms

CHARACTERISTICS AND TYPICAL OPERATION – CLASS C OSCILLATOR:

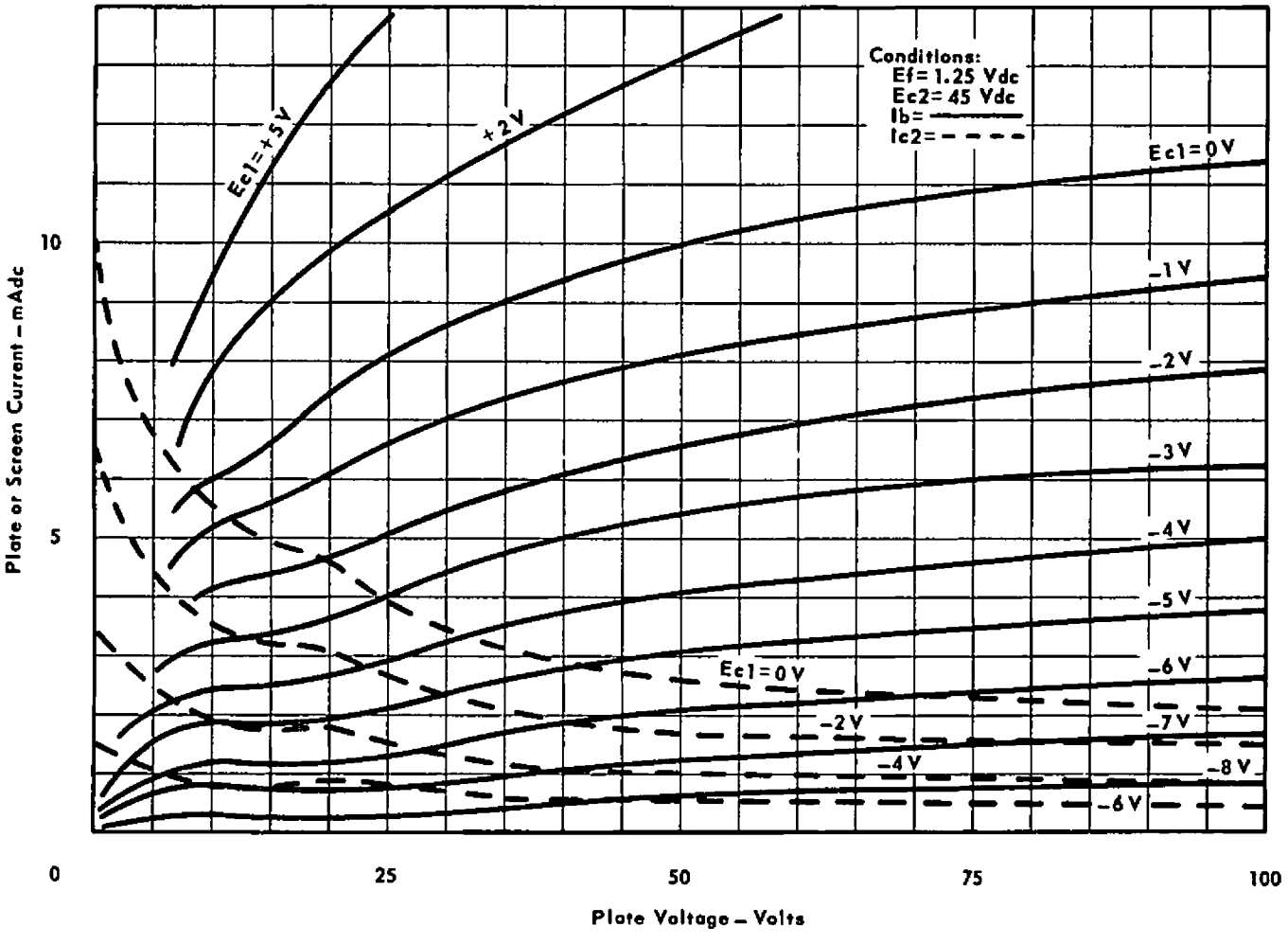
Filament Voltage (dc)	1.25	volts
Filament Current	100	ma
DC Plate Voltage	45	volts
DC Grid #2 Voltage	45	volts
Plate Current	4.8	ma
Grid #2 Current	2.0	ma
Grid #1 Current (approx.)	200	μa
Useful Power Output	75	mw
Frequency	50	Mc

▲ *Grid #3 is comprised of two separate deflector plates, one of which is connected to lead 3 and the other to lead 5.*

These data identify a particular developmental tube design, and the tube designation or the descriptive data may be subject to change or abandonment.

Objective Data

INDUSTRIAL COMPONENTS DIVISION

Printed in USA

AVERAGE PLATE CHARACTERISTICS