

1LC6

Description and Rating

PENTAGRID CONVERTER

GENERAL DESCRIPTION

Principal Application: The 1LC6 is a filament type pentagrid converter designed particularly for use in low drain battery-operated equipment. This tube

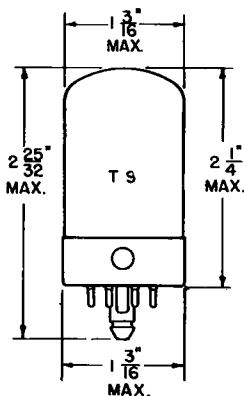
Cathode: Coated Filament
 Filament Voltage (D-C) 1.4 Volts
 Filament Current 0.05 Ampere
 Envelope: T-9 Glass
 Base: D8-1 Locking-In 8-Pin
 Mounting Position: Any

will operate satisfactorily with only 45 volts B supply.

Direct Interelectrode Capacitances: *

Grid Number 4 to Plate	0.28	$\mu\mu\text{f}$
Grid Number 4 to Grid Number 2	0.38	$\mu\mu\text{f}$
Grid Number 4 to Grid Number 1	0.11	$\mu\mu\text{f}$
Grid Number 1 to Grid Number 2	0.6	$\mu\mu\text{f}$
Grid Number 4 to All	9.0	$\mu\mu\text{f}$
Grid No.2 to All Except Grid No.1	4.6	$\mu\mu\text{f}$
Grid No.1 to All Except Grid No.2	2.4	$\mu\mu\text{f}$
Plate to All	5.5	$\mu\mu\text{f}$

PHYSICAL DIMENSIONS

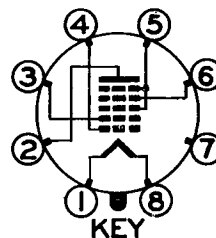


RMA 9-30

TERMINAL CONNECTIONS

- Pin 1 - Positive filament
- Pin 2 - Plate
- Pin 3 - Grid Number 2
- Pin 4 - Grid Number 1
- Pin 5 - Grids Number 3 and Number 5
- Pin 6 - Grid Number 4
- Pin 7 - No Connection
- Pin 8 - Negative Filament

BASING DIAGRAM



RMA 7AK
BOTTOM VIEW

DESIGN CENTER VALUES:

Plate Voltage	110	Volts
Screen Voltage (Grids Number 3 and Number 5)	45	Volts
Anode Grid Voltage (Grid Number 2)	50	Volts
Screen Supply Voltage	110	Volts
Total Cathode Current	3.0	Milliamperes

MAXIMUM RATINGS

CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage	45	90	Volts
Screen Voltage **	35	35	Volts
Anode Grid Voltage	45	45	Volts
Control Grid Voltage#.	0	0	Volts
Oscillator Grid Resistor	0.2	0.2	Megohm
Plate Resistance	0.3	0.65	Megohm
Plate Current	0.7	0.75	Milliamperes
Screen Current	0.75	0.7	Milliamperes
Anode Grid Current	1.4	1.4	Milliamperes
Oscillator Grid Current	0.035	0.035	Milliamperes
Total Cathode Current	2.9	2.9	Milliamperes

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CHARACTERISTICS AND TYPICAL OPERATION

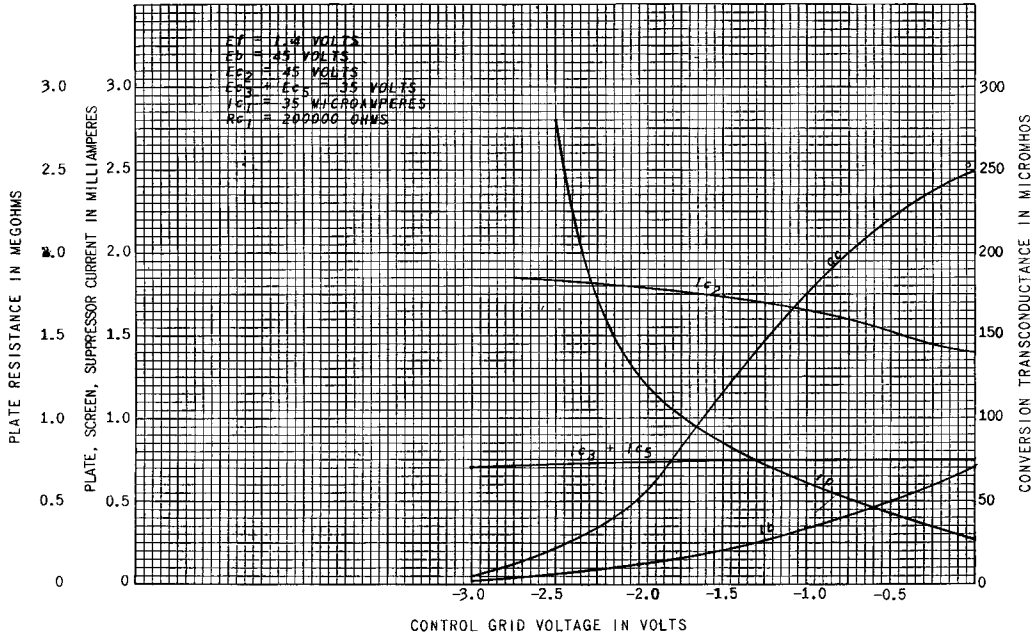
Conversion Transconductance

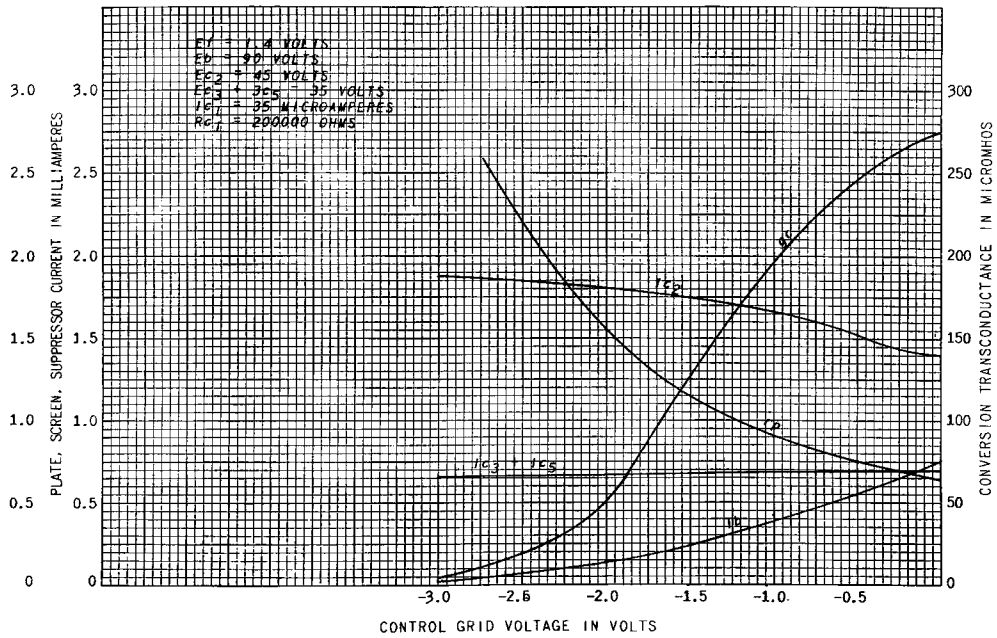
Control Grid Voltage at 0 Volts	250	275	Micromhos
Control Grid Voltage at -2 Volts	50	50	Micromhos
Control Grid Voltage at -3 Volts (Approximate)	5	5	Micromhos

* With external shield connected to negative filament.

** Obtained by using a properly by-passed voltage dropping resistor in series with B voltage supply.

A resistance of at least 1.0 megohm should be used in the grid return to negative filament.





TUBE DEPARTMENT

GENERAL  **ELECTRIC**

Schenectady 5, N. Y.