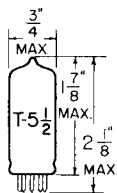


TUNG-SOL

HEPTODE

MINIATURE TYPE



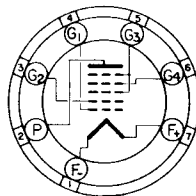
GLASS BULB

COATED FILAMENT

1.4 VOLTS 50 MA.

DC

ANY MOUNTING POSITION



BOTTOM VIEW  
MINIATURE BUTTON  
7 PIN BASE

7DC

THE 1L6 IS A PENTAGRID CONVERTER USING THE 7 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED FOR USE IN LOW DRAIN BATTERY OPERATED RECEIVERS.

DIRECT INTERELECTRODE CAPACITANCES

WITH RMA SHIELD #316 CONNECTED TO PIN 1

RF INPUT: $G_4$ TO $(F+G_1+G_2+G_{3&5}+P)$	7.5	$\mu\mu\text{f}$
OSC. OUTPUT: $G_2$ TO $(F+G_{3&5}+G_4+P)$	2.6	$\mu\mu\text{f}$
OSC. INPUT: $G_1$ TO $(F+G_{3&5}+G_4+P)$	2.2	$\mu\mu\text{f}$
MIXER OUTPUT: P TO $(F+G_1+G_2+G_{3&5}+G_4)$	12	$\mu\mu\text{f}$
GRID #4 TO PLATE: $(G_4$ TO P)	0.3	$\mu\mu\text{f}$
GRID #4 TO GRID #2: $(G_4$ TO $G_2)$	0.24	$\mu\mu\text{f}$
GRID #4 TO GRID #1: $(G_4$ TO $G_1)$	0.19	$\mu\mu\text{f}$
GRID #1 TO GRID #2: $(G_1$ TO $G_2)$	0.8	$\mu\mu\text{f}$

RATINGS

INTERPRETED ACCORDING TO RMA STANDARD MB-210

FILAMENT VOLTAGE	1.4	VOLTS
MAXIMUM PLATE VOLTAGE	110	VOLTS
MAXIMUM GRID #3 AND #5 VOLTAGE	65	VOLTS
MAXIMUM GRID #3 AND #5 SUPPLY VOLTAGE	110	VOLTS
MAXIMUM GRID #2 VOLTAGE	110	VOLTS
MAXIMUM CATHODE CURRENT	4	MA.
MINIMUM GRID #4 CIRCUIT RESISTANCE	1	MEGOHM

PRINTED IN U. S. A.

PLATE  
2353  
MAR. 1  
1950

CONTINUED ON FOLLOWING PAGE

## TUNG-SOL

CONTINUED FROM PRECEDING PAGE

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

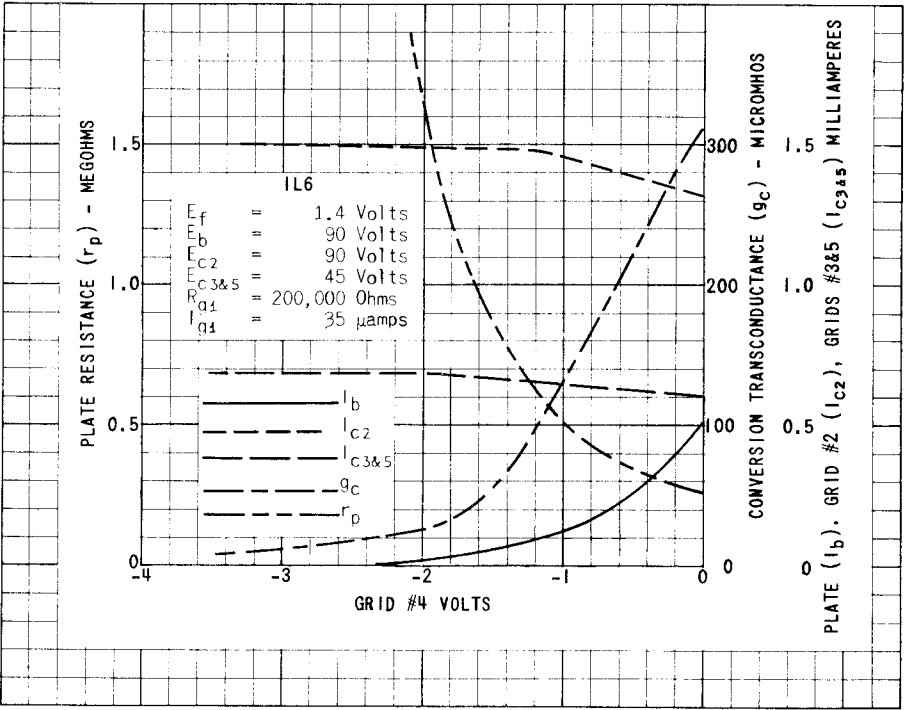
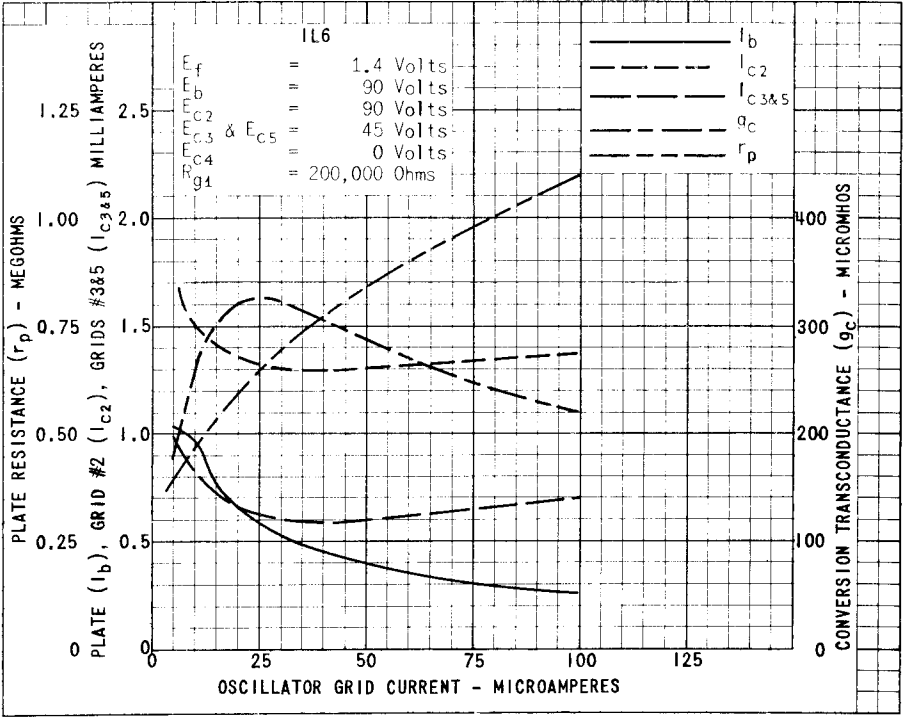
## CONVERTER

FILAMENT VOLTAGE	1.4	VOLTS
FILAMENT CURRENT	50	MA.
PLATE VOLTAGE	90	VOLTS
GRID #3 AND #5 VOLTAGE <sup>A</sup>	45	VOLTS
GRID #2 VOLTAGE	90	VOLTS
GRID #4 VOLTAGE	0	VOLTS
GRID #4 CIRCUIT RESISTANCE	1	MEGOHM
GRID #1 RESISTOR	0.2	MEGOHM
PLATE RESISTANCE (APPROX.)	0.65	MEGOHM
PLATE CURRENT	0.5	MA.
GRID #3 AND #5 CURRENT	0.6	MA.
GRID #2 CURRENT	1.2	MA.
GRID #1 CURRENT	0.035	MA.
TOTAL CATHODE CURRENT	2.35	MA.
CONVERSION TRANSCONDUCTANCE	300	μMHOS
CONVERSION TRANSCONDUCTANCE AT E <sub>C4</sub> = -3 VOLTS (APPROX.)	10	μMHOS

<sup>A</sup> OBTAINED PREFERABLY BY USING A PROPERLY BY-PASSED DROPPING RESISTOR OF FROM 45000 OHMS TO 75000 OHMS IN SERIES WITH THE B SUPPLY.

OSCILLATOR TRANSCONDUCTANCE  
NOT OSCILLATING

GRID #4 VOLTAGE	0	VOLTS
GRID #1 VOLTAGE	0	VOLTS
PLATE VOLTAGE	90	VOLTS
GRID #3 AND #5 VOLTAGE	45	VOLTS
GRID #2 VOLTAGE	90	VOLTS
OSCILLATOR TRANSCONDUCTANCE	650	μMHOS



PRINTED IN U. S. A.

PLATE 2355  
MAR. 1 1950