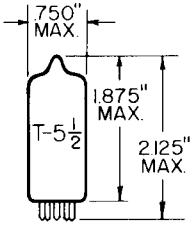
TUNG-SOL

PENTODE

MINIATURE TYPE

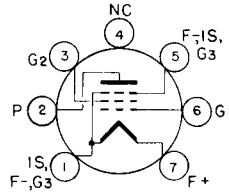


GLASS BULB
MINIATURE BUTTON 7 PIN BASE E7-1
OUTLINE DRAWING JEDEC 5-2

COATED FILAMENT

FILAMENT
1.4 VOLTS 50 MA.
DC

ANY MOUNTING POSITION



BOTTOM VIEW
BASING DIAGRAM
JEDEC 6AR

THE 1T4 IS A MINIATURE SUPER-CONTROL RF PENTODE. IT IS RECOMMENDED FOR USE IN COMPACT, LIGHT-WEIGHT, PORTABLE RECEIVERS WHERE AVC IS REQUIRED. THE 1T4 FEATURES ADEQUATE INTERNAL SHIELDING FOR MOST PURPOSES, BUT EXTERNAL SHIELDING IS RECOMMENDED WHERE MINIMUM GRID-PLATE CAPACITANCE IS TO BE OBTAINED.

DIRECT INTERELECTRODE CAPACITANCES

WITH OR WITHOUT EXTERNAL SHIELD #316 CONNECTED TO PIN #1

GRID TO PLATE: (G_1 TO P) MAX.	0.01	pf
INPUT: G_1 TO ($F\&G_3+G_2$)	3.6	pf
OUTPUT: P TO ($F\&G_3+G_2$)	7.5	pf

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

MAXIMUM PLATE VOLTAGE	90	VOLTS
MAXIMUM GRID #2 VOLTAGE	→ 90	VOLTS
MAXIMUM POSITIVE DC GRID #1 VOLTAGE	0	VOLTS
MAXIMUM CATHODE CURRENT	5.5	MA.

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A_1 AMPLIFIER

PLATE VOLTAGE	45	67.5	90	90	VOLTS
GRID #2 VOLTAGE	45	67.5	45	67.5	VOLTS
GRID #1 VOLTAGE	0	0	0	0	VOLTS
PLATE RESISTANCE (APPROX.)	0.35	0.25	0.8	0.5	MEGOHM
TRANSCONDUCTANCE	700	875	750	900	µMHOS
PLATE CURRENT	1.7	3.4	1.8	3.5	MA.
GRID #2 CURRENT	0.7	1.5	0.65	1.4	MA.
GRID #1 VOLTAGE FOR g_m = 10 µMHOS	-10	-16	-10	-16	VOLTS

→INDICATES A CHANGE.

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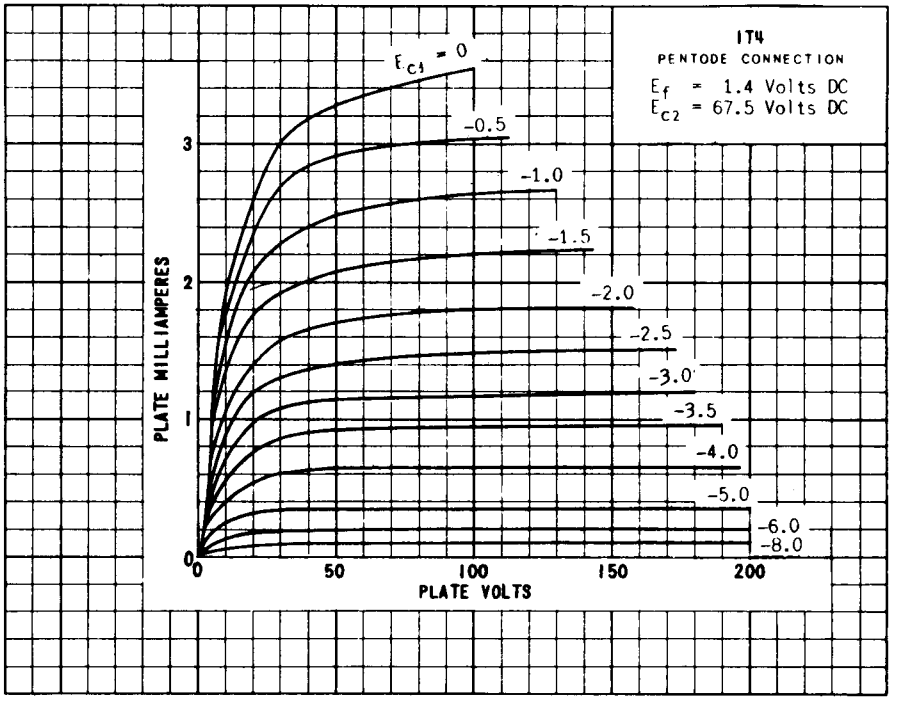
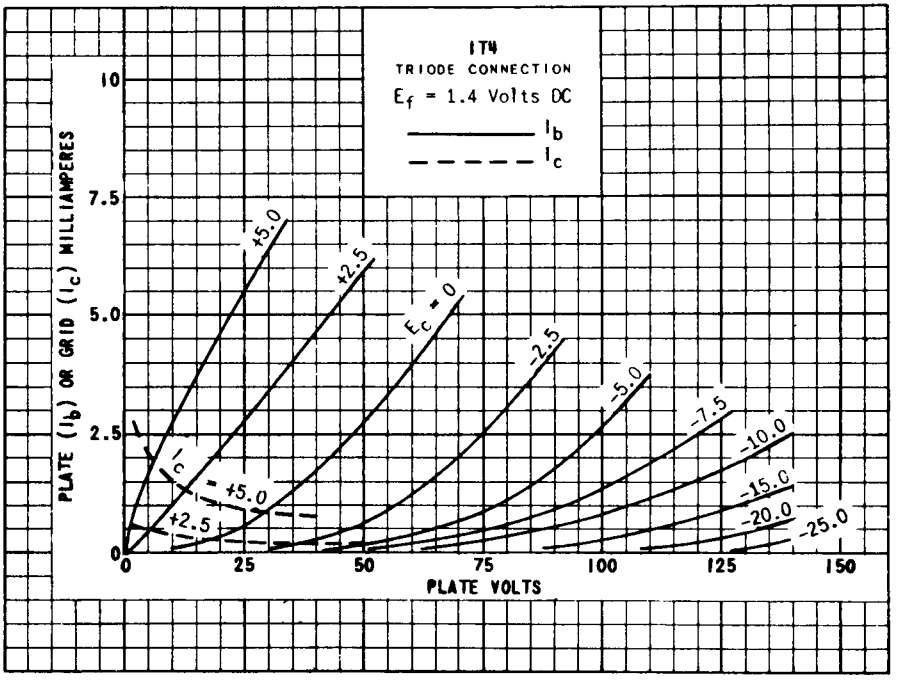
1T4


1T4
PENTODE CONNECTION
E_f = 1.4 Volts DC
E_{c2} = 67.5 Volts DC
E_{c1} = 0
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
-3.5
-4.0
-5.0
-6.0
-8.0
PLATE MILLIAMPERES
PLATE VOLTS
0
1
2
3
0
50
100
150
200


1T4
TRIODE CONNECTION
E_f = 1.4 Volts DC
I_b
I_c
PLATE (I_b) OR GRID (I_c) MILLIAMPERES
PLATE VOLTS
E_c = 0
+5.0
+2.5
-2.5
-5.0
-7.5
-10.0
-15.0
-20.0
-25.0
I_c
0
2.5
5.0
7.5
10
0
25
50
75
100
125
150

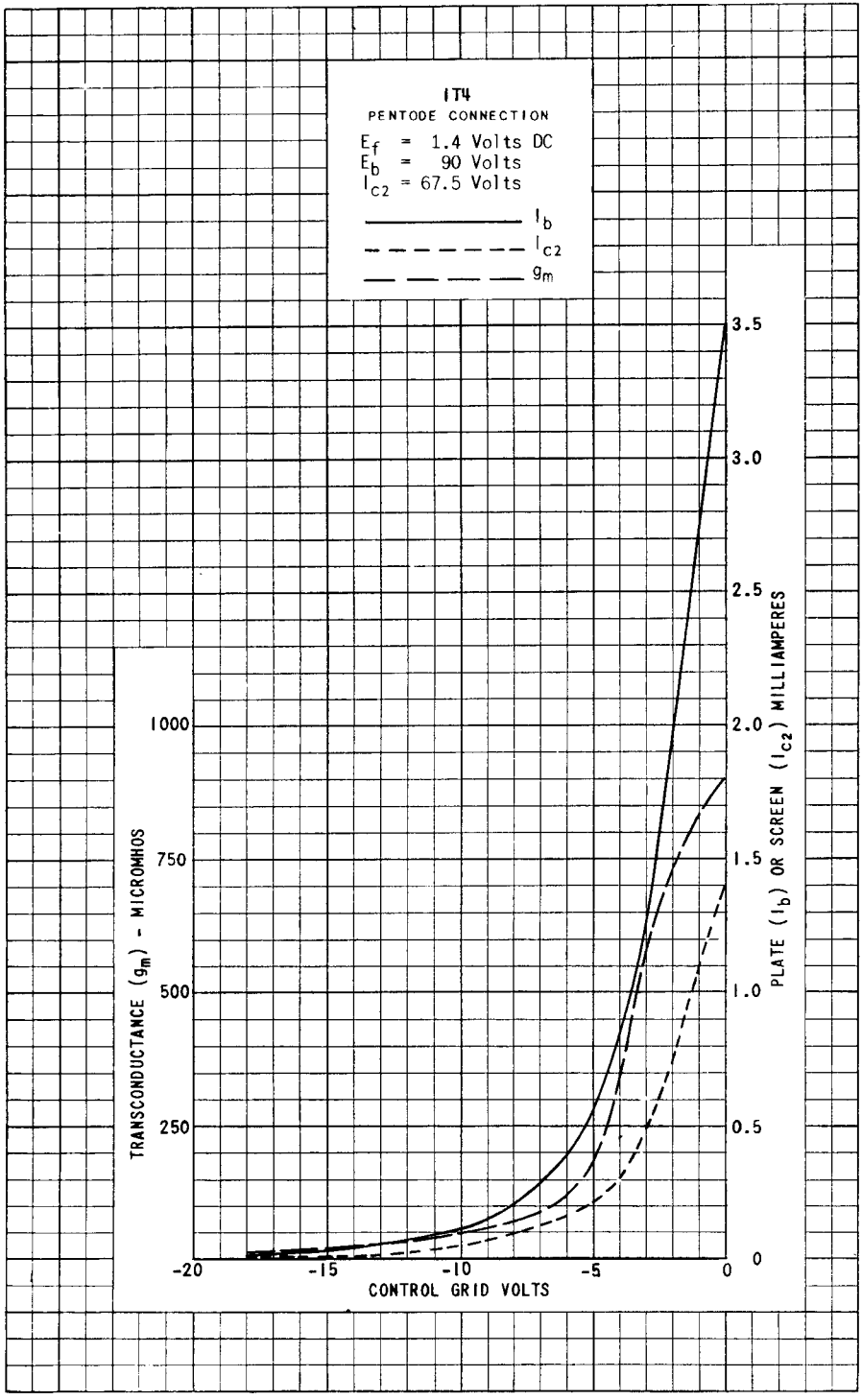


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PLATE
1906
NOV. 1,
1947