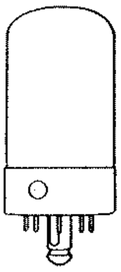
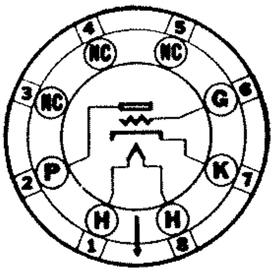
7A4 Sylvania Type

MEDIUM-MU TRIODE

GT EQUIVALENT 6J5GT





5AC-L-0

PHYSICAL SPECIFICATIONS

Base	Lock-In 8 Pin
Bulb	T-9
Maximum Overall Length	$2\frac{25}{32}$"
Maximum Seated Height	$2\frac{1}{4}$"
Mounting Position	Any

Heater Voltage (Nominal) AC or DC	7.0 Volts
Heater Current (Nominal)	0.32 Ampere
Maximum Plate Voltage	300 Volts
Maximum Plate Dissipation	2.5 Watts
Minimum External Grid Bias Voltage	0 Volt
Maximum Heater-Cathode Voltage	90 Volts

Direct Interelectrode Capacitances:*

Grid to Plate	4.0 $\mu\mu$f.
Grid to Cathode	3.4 $\mu\mu$f.
Plate to Cathode	3.0 $\mu\mu$f.

*With $1\frac{5}{16}$" diameter shield (RMA Std. M8-308) connected to cathode.

TYPICAL OPERATION

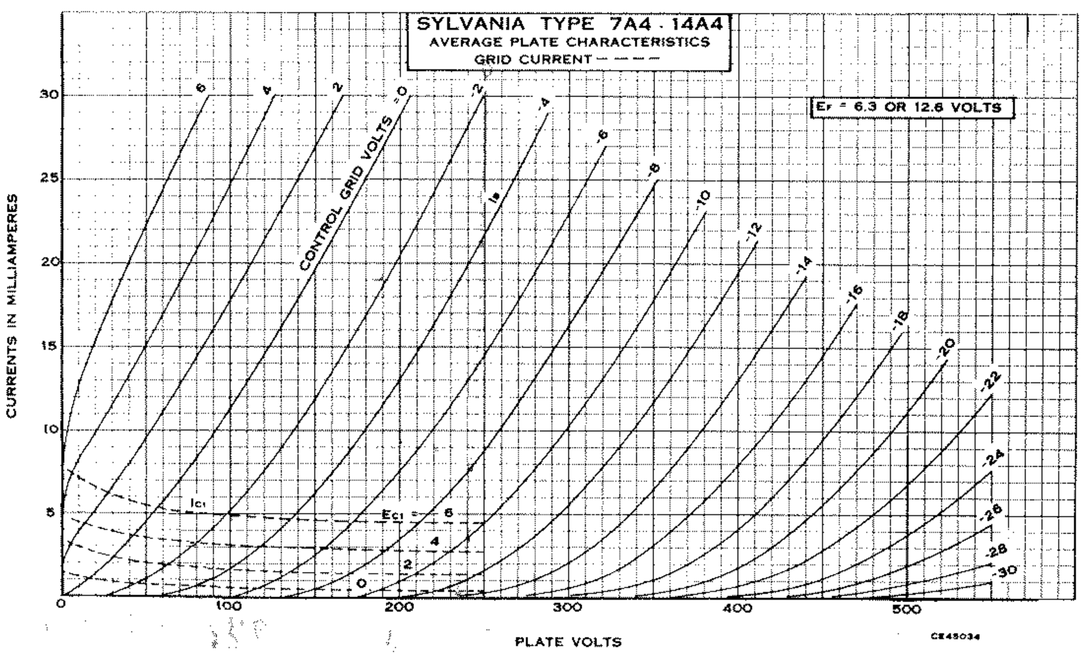
CLASS A AMPLIFIER

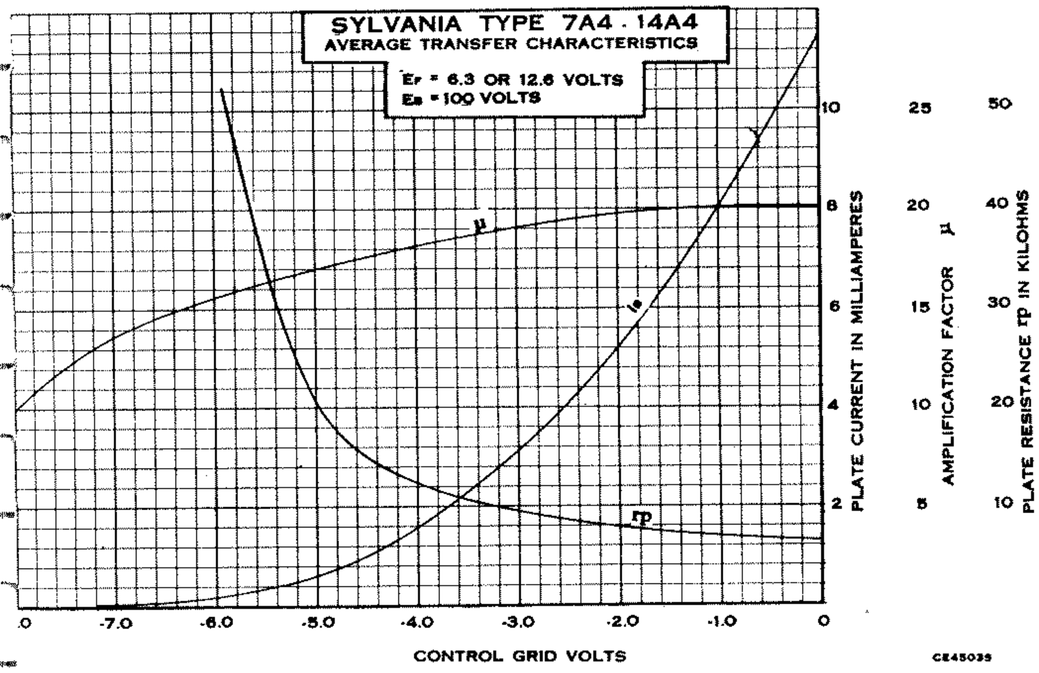
Heater Voltage	6.3	6.3 Volts
Heater Current	0.3	0.3 Ampere
Plate Voltage	90	250 Volts
Grid Voltage	0	−8 Volts
Self-Bias Resistor	0	900 Ohms
Plate Current	10	9 Ma.
Plate Resistance (Approximate)	6700	7700 Ohms
Mutual Conductance	3000	2600 μmhos
Amplification Factor	20	20

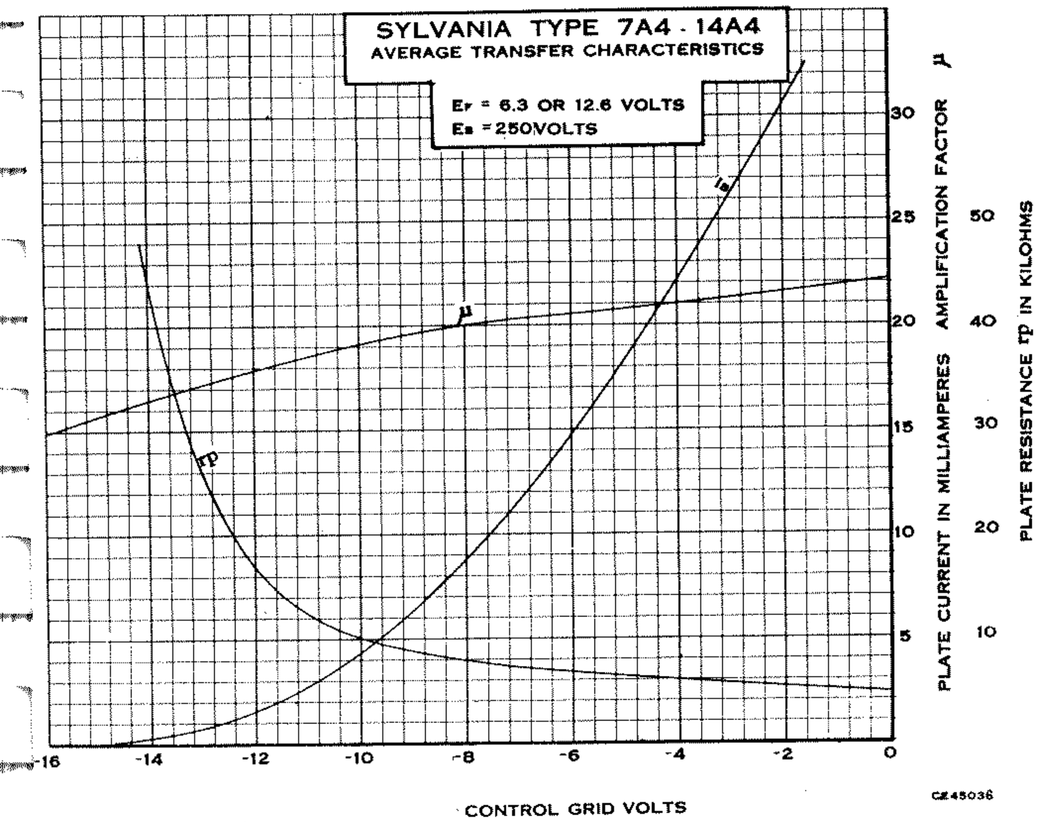
APPLICATION

Sylvania Type 7A4 is a medium-mu triode designed for use as an oscillator, detector or amplifier. It is quite similar to types 6J5GT but gives improved performance especially at the higher frequencies, due to the lock-in type of construction. This construction results in shorter leads, lower capacitances, and lower base losses. This tube may be used successfully to about 225 mc. as an oscillator. For higher frequencies, types 7E5/1201 or 7F8 should be considered.

Tabulated data for resistance coupled operation will be found on page 46.




SYLVANIA TYPE 7A4 - 14A4
AVERAGE TRANSFER CHARACTERISTICS
Ef = 6.3 OR 12.6 VOLTS
Eb = 100 VOLTS
μ
ib
rp
10
8
6
4
2
25
20
15
10
5
50
40
30
20
10
.0
-7.0
-6.0
-5.0
-4.0
-3.0
-2.0
-1.0
0
PLATE CURRENT IN MILLIAMPERES
AMPLIFICATION FACTOR μ
PLATE RESISTANCE rp IN KILOHMS
CONTROL GRID VOLTS
CE45035


SYLVANIA TYPE 7A4 - 14A4
AVERAGE TRANSFER CHARACTERISTICS
Ef = 6.3 OR 12.6 VOLTS
Eb = 250VOLTS
μ
ib
rp
30
25
20
15
10
5
50
40
30
20
10
-16
-14
-12
-10
-8
-6
-4
-2
0
PLATE CURRENT IN MILLIAMPERES
AMPLIFICATION FACTOR μ
PLATE RESISTANCE rp IN KILOHMS
CONTROL GRID VOLTS
CE45036