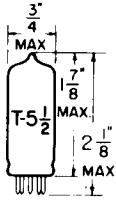
TUNG-SOL

HEPTODE

MINIATURE TYPE

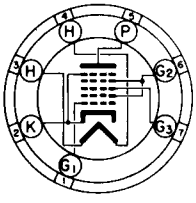


GLASS BULB

COATED UNIPOTENTIAL CATHODE

HEATER
6.3 VOLTS 0.3 AMP.
AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
MINIATURE BUTTON
7 PIN BASE
7CM

THE 6CS6 IS A MINIATURE DUAL CONTROL PENTAGRID TUBE INTENDED FOR USE IN SYNC SEPARATOR CIRCUITS. IN THESE CIRCUITS IT PROVIDES IMPROVED NOISE IMMUNITY. BOTH CONTROL GRIDS HAVE SHARP CUT-OFF CHARACTERISTICS.

DIRECT INTERELECTRODE CAPACITANCES – APPROX.

GRID #1 TO PLATE: G_1 TO P (MAX.)	0.05	μμf
GRID #3 TO PLATE: G_3 TO P (MAX)	0.36	μμf
#1 INPUT: G_1 TO (H+K+G_2+$G_{3\&5}$)	5.5	μμf
#3 INPUT: G_3 TO (H+K+G_1+$G_{2\&5}$)	7.0	μμf
OUTPUT: P TO (H+K+G_1+G_2+$G_{3\&5}$)	7.5	μμf
COUPLING: G_1 TO G_3 (MAX.)	0.22	μμf

RATINGS ←

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

DESIGN CENTER VALUES

HEATER VOLTAGE	6.3	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE:		
HEATER NEGATIVE		
TOTAL DC AND PEAK	200	VOLTS
HEATER POSITIVE		
DC	100	VOLTS
TOTAL DC AND PEAK	200	VOLTS
MAXIMUM PLATE VOLTAGE	300	VOLTS
MAXIMUM GRID #2 & #4 VOLTAGE[A]		
MAXIMUM GRID #2 & #4 SUPPLY VOLTAGE	300	VOLTS
MAXIMUM PLATE DISSIPATION	1.0	WATT
MAXIMUM GRID #2 & #4 DISSIPATION:		
FOR GRID #2 & GRID #4 VOLTAGES UP TO 150 VOLTS	1.0	VOLTS
FOR GRID #2 & GRID #4 VOLTAGES BETWEEN 150 & 300V.[A]		
MAXIMUM CATHODE CURRENT	14	MA.
MAXIMUM GRID #1 CIRCUIT RESISTANCE	0.47	MEGOHM
MAXIMUM GRID #3 CIRCUIT RESISTANCE	2.2	MEGOHMS

[A] SEE SCREEN DISSIPATION RATING CHART JEDEC #J5-C4-2.

→ INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE

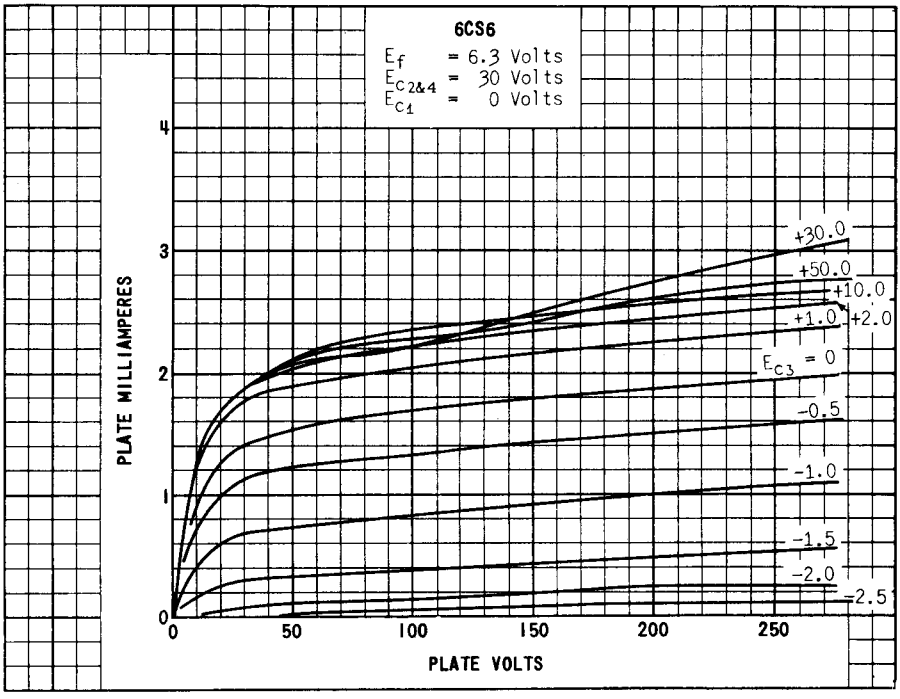
TUNG-SOL

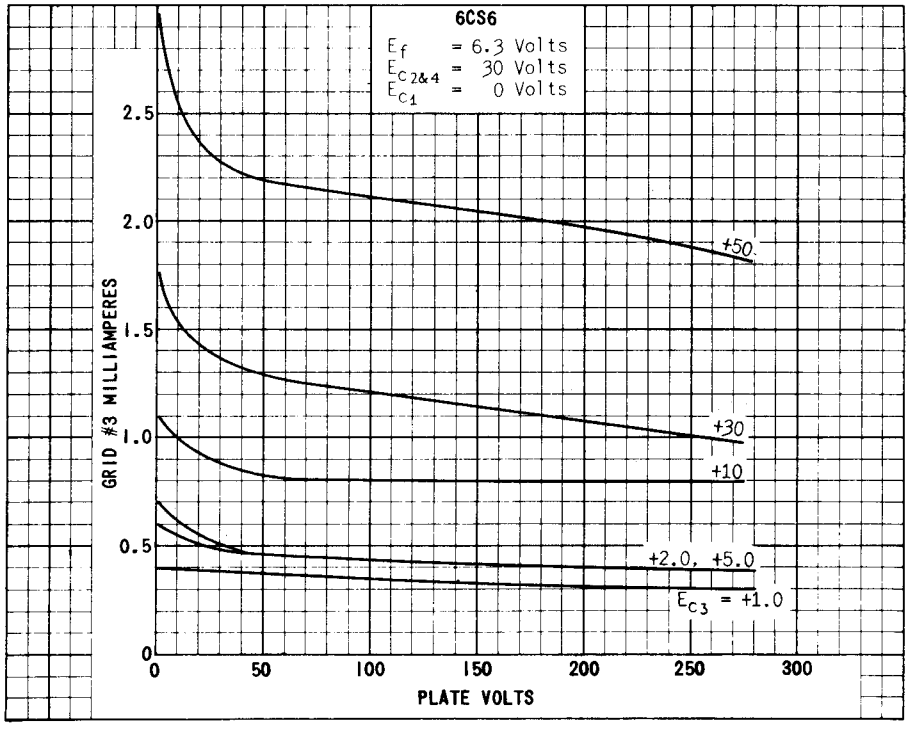
CONTINUED FROM PRECEDING PAGE

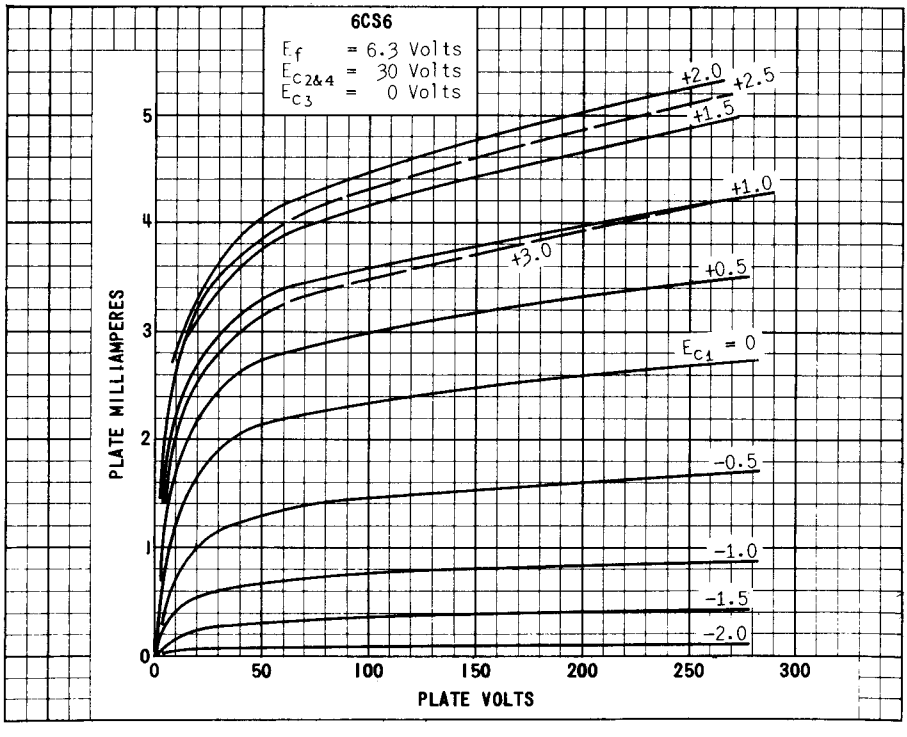
TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A_1 AMPLIFIER

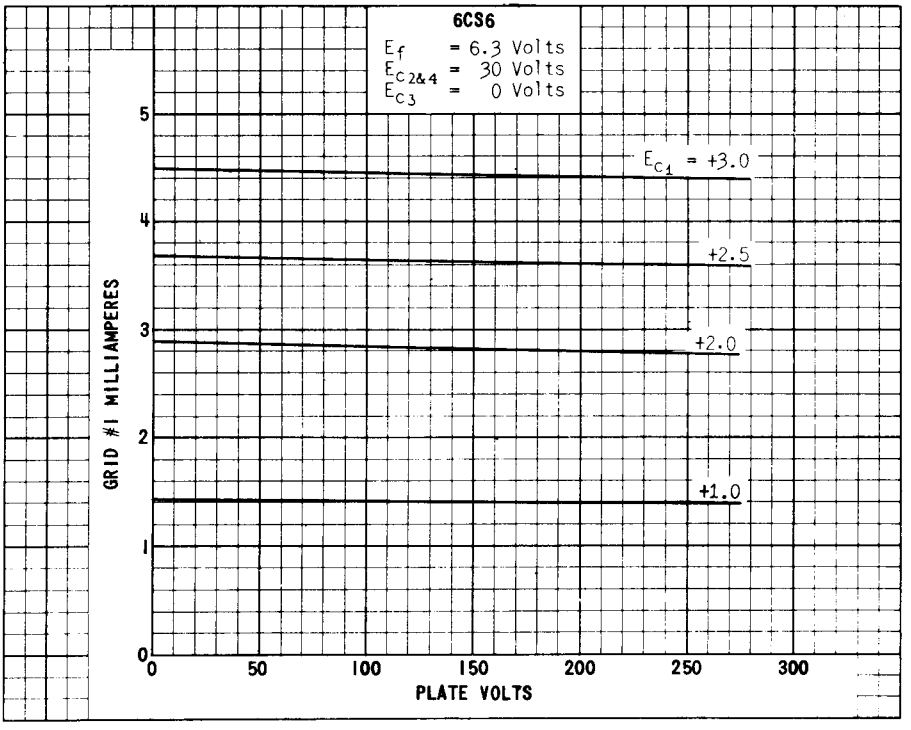
HEATER VOLTAGE	6.3	6.3	6.3	VOLTS
HEATER CURRENT	0.3	0.3	0.3	AMP.
PLATE VOLTAGE	10	100	100	VOLTS
GRID #2 & #4 VOLTAGE	30	30	30	VOLTS
GRID #1 VOLTAGE	0	0	-1	VOLTS
GRID #3 VOLTAGE	0	-1	0	VOLTS
PLATE CURRENT	2.0	0.8	1.0	MA.
GRID #2 & #4 CURRENT	4.5	5.5	1.3	MA.
TRANSCONDUCTANCE (MEASURED BETWEEN GRID #1 AND PLATE)	---	---	100	μMHOS
TRANSCONDUCTANCE (MEASURED BETWEEN GRID #3 AND PLATE)	---	1 500	---	μMHOS
PLATE RESISTANCE (APPROX.)	---	0.7	1.0	MEGOHM
GRID #1 VOLTAGE (APPROX.) FOR I_b=50 μA	---	---	-2.5	VOLTS
GRID #3 VOLTAGE (APPROX.) FOR I_b=50 μA	---	-2.2	---	VOLTS







6CS6 (12CS6)



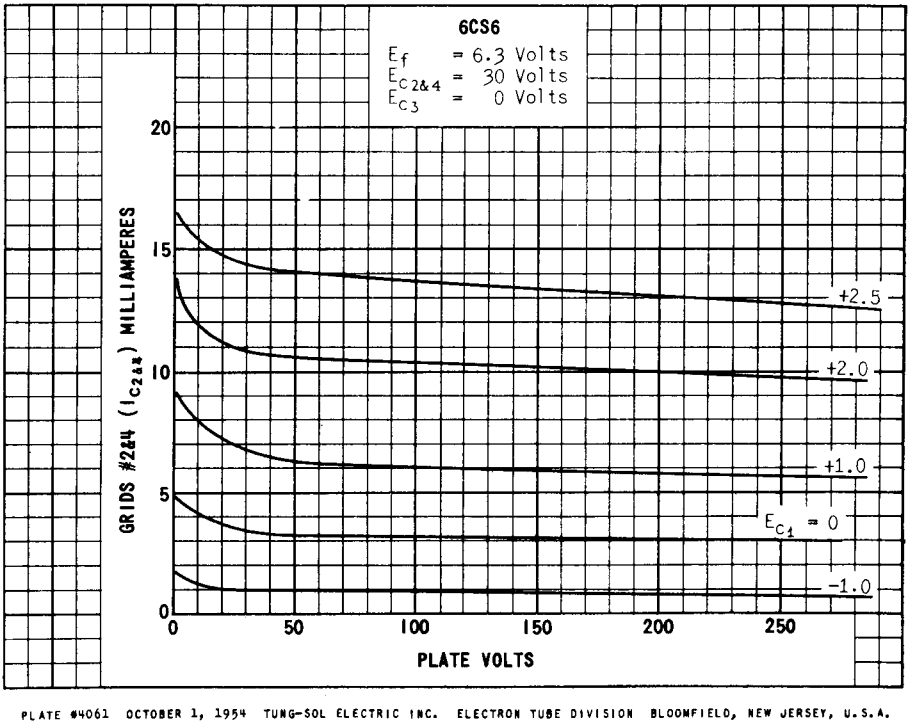
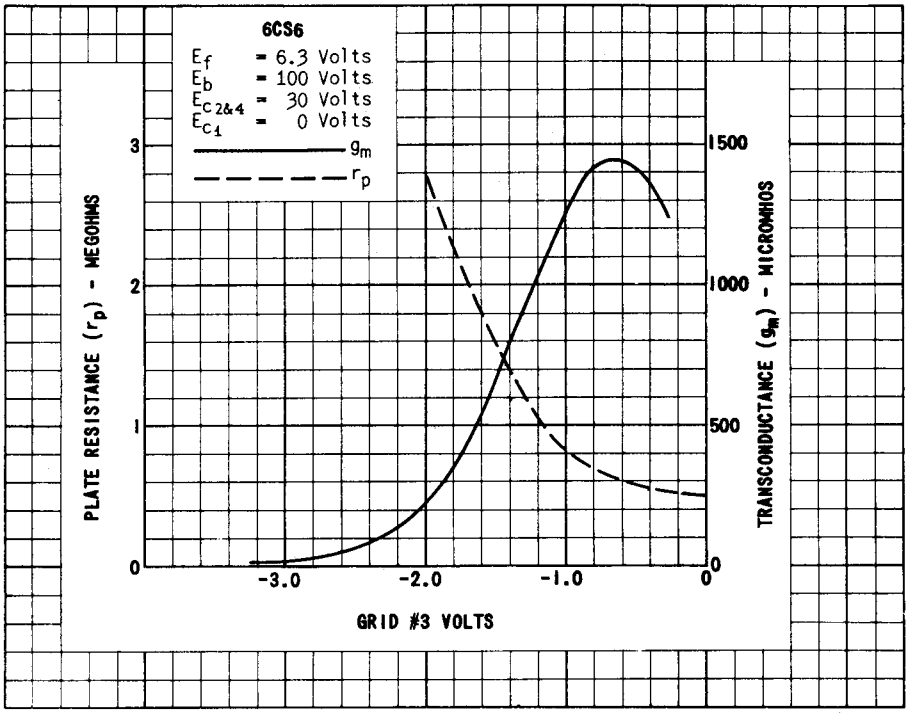
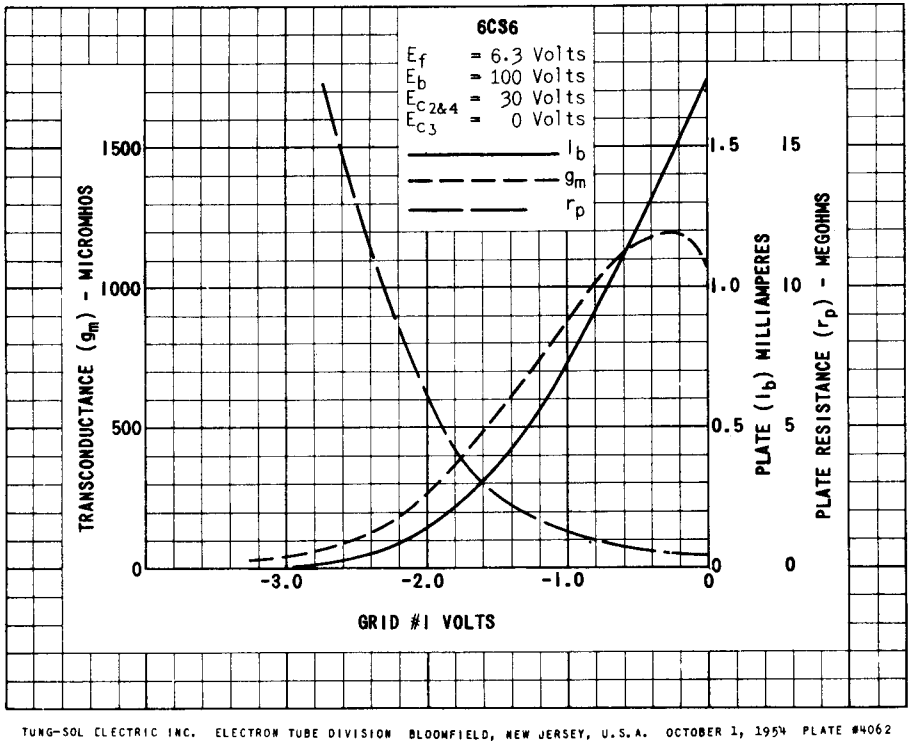
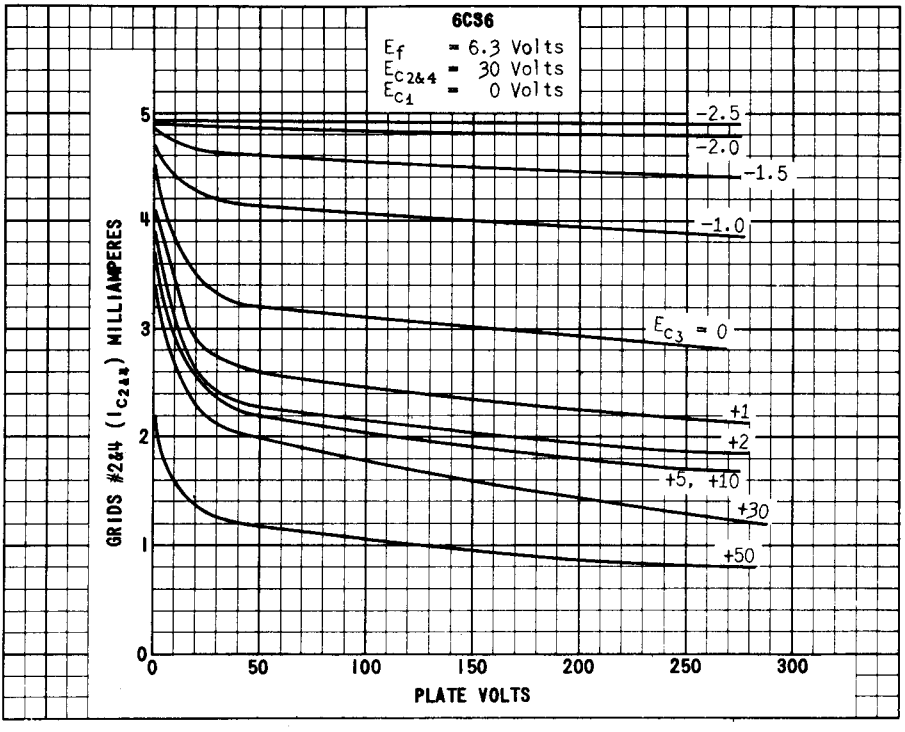


PLATE #4061 OCTOBER 1, 1954 TUNG-SOL ELECTRIC INC. ELECTRON TUBE DIVISION BLOOMFIELD, NEW JERSEY, U.S.A.





6CS6(12CS6)


6CS6
E_f = 6.3 Volts
$E_{c2\&4}$ = 30 Volts
E_{c1} = 0 Volts
-2.5
-2.0
-1.5
-1.0
E_{c3} = 0
+1
+2
+5, +10
+30
+50
GRIDS #2&4 ($I_{c2\&4}$) MILLIAMPERES
0
1
2
3
4
5
0
50
100
150
200
250
300
PLATE VOLTS