TUNG-SOL

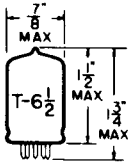
TRIODE

MINIATURE TYPE

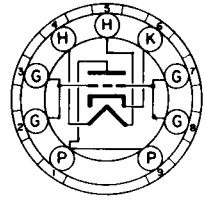
COATED UNIPOTENTIAL CATHODE

HEATER
6.3 VOLTS 0.225 AMP.
AC OR DC

ANY MOUNTING POSITION



GLASS BULB



BOTTOM VIEW
SMALL BUTTON
9 PIN BASE
9DR

THE 6BC4 IS A UHF MEDIUM-MU TRIODE OF THE 9-PIN MINIATURE TYPE UTILIZING A VERY SHORT BULB. IT IS DESIGNED FOR USE AS AN RF AMPLIFIER IN THE CATHODE-DRIVE CIRCUITS OF UHF TELEVISION TUNERS COVERING THE FREQUENCY RANGE OF 470 TO 890 MEGACYCLES PER SECOND.

DIRECT INTERELECTRODE CAPACITANCES - APPROX.

WITH NO EXTERNAL SHIELD

GRID TO PLATE	1.6	μμf
GRID TO HEATER AND CATHODE	2.9	μμf
PLATE TO HEATER AND CATHODE	0.26	μμf
HEATER TO CATHODE	2.7	μμf

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

CLASS A_1 AMPLIFIER

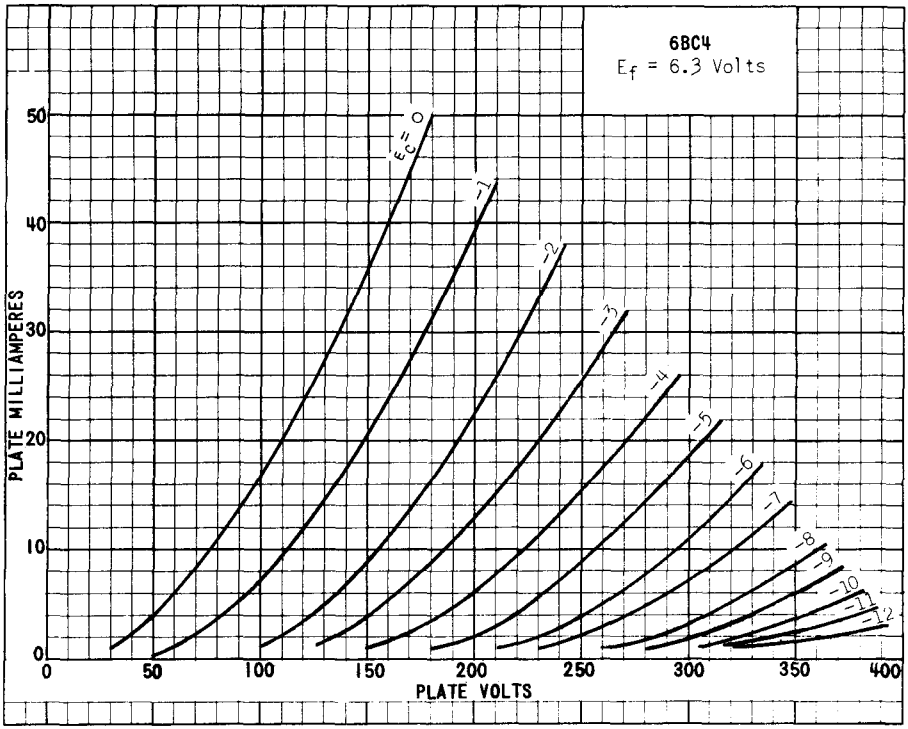
HEATER VOLTAGE	6.3	VOLTS
MAXIMUM PEAK HEATER-CATHODE VOLTAGE:		
HEATER NEGATIVE WITH RESPECT TO CATHODE	75	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	75	VOLTS
MAXIMUM PLATE VOLTAGE	250	VOLTS
MAXIMUM PLATE DISSIPATION	2.5	WATTS
MAXIMUM CATHODE CURRENT	25	MA.
MAXIMUM GRID #1 CIRCUIT RESISTANCE:		
FOR CATHODE-BIAS OPERATION	0.5	MEGOHM
FOR FIXED-BIAS OPERATION	NOT RECOMMENDED	

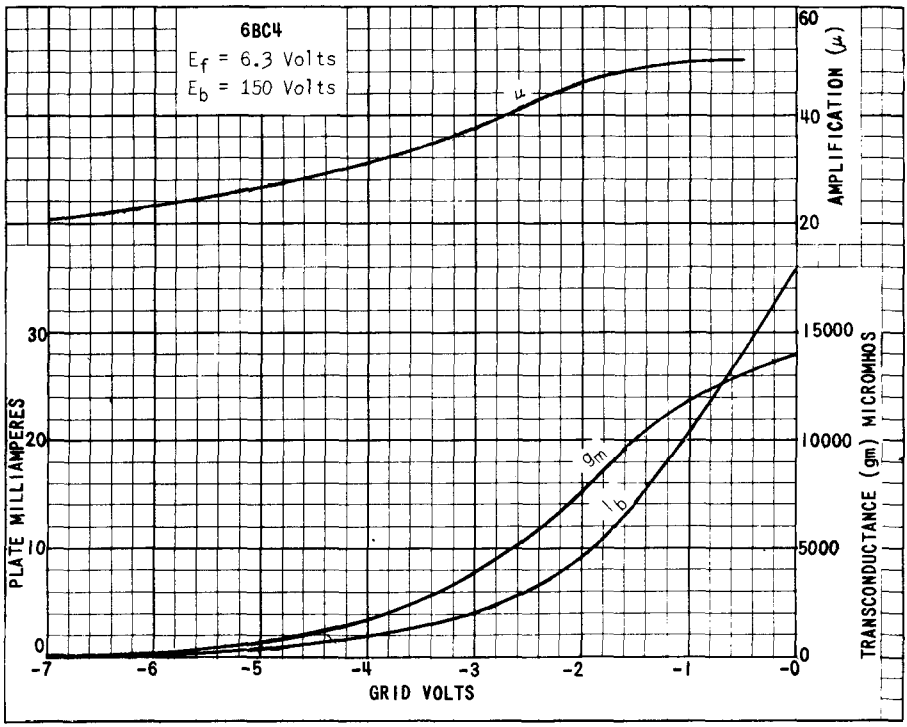
TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A_1 AMPLIFIER

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.225	AMP.
PLATE SUPPLY VOLTAGE	150	VOLTS
CATHODE-BIAS RESISTOR	100	OHMS
AMPLIFICATION FACTOR	48	
PLATE RESISTANCE	4800	OHMS
TRANSCONDUCTANCE	10000	μMHOS
GRID BIAS (APPROX.) FOR PLATE CURRENT OF 10 μAMP	-10	VOLTS
PLATE CURRENT	14.5	MA

6BC4


6BC4
Ef = 6.3 Volts
Ec = 0
-1
-2
-3
-4
-5
-6
-7
-8
-9
-10
-11
-12
PLATE MILLIAMPERES
0
10
20
30
40
50
0
50
100
150
200
250
300
350
400
PLATE VOLTS


6BC4
Ef = 6.3 Volts
Eb = 150 Volts
μ
AMPLIFICATION (μ)
20
40
60
gm
Ib
PLATE MILLIAMPERES
0
10
20
30
TRANSCONDUCTANCE (gm) MICROMHOS
0
5000
10000
15000
-7
-6
-5
-4
-3
-2
-1
-0
GRID VOLTS