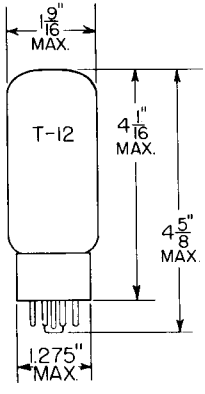
TUNG-SOL

BEAM PENTODE

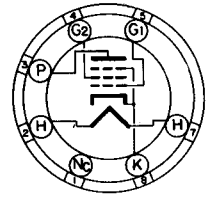


GLASS BULB

COATED UNIPOTENTIAL CATHODE

HEATER
50 VOLTS 0.15 AMP.
AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
SHORT MEDIUM SHELL
7 PIN OCTAL
7S

THE 50C6GA IS A BEAM POWER AMPLIFIER HAVING HIGH POWER SENSITIVITY AND HIGH POWER OUTPUT AT COMPARATIVELY LOW DC SUPPLY VOLTAGES. EXCEPT FOR ITS T-12 ENVELOPE THE 50C6GA IS IDENTICAL TO THE 50C6G.

RATINGS
INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HEATER VOLTAGE	50	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE:		
HEATER NEGATIVE WITH RESPECT TO CATHODE	180	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	180	VOLTS
MAXIMUM PLATE VOLTAGE	200	VOLTS
MAXIMUM GRID #2 SUPPLY VOLTAGE	200	VOLTS
MAXIMUM GRID #2 VOLTAGE	SEE RATING CHART	
MAXIMUM PLATE DISSIPATION	12.5	WATTS
MAXIMUM GRID #2 DISSIPATION	1.75	WATTS
MAXIMUM GRID #1 CIRCUIT RESISTANCE:		
FIXED BIAS	0.1	MEGOHM
SELF BIAS	0.5	MEGOHM

CONTINUED ON FOLLOWING PAGE

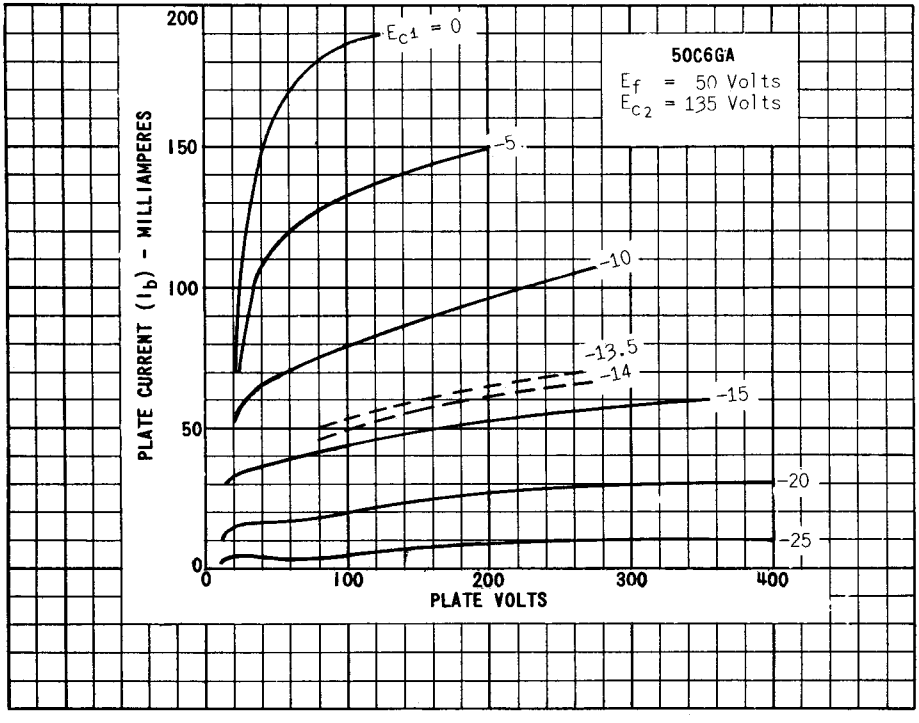
TUNG-SOL

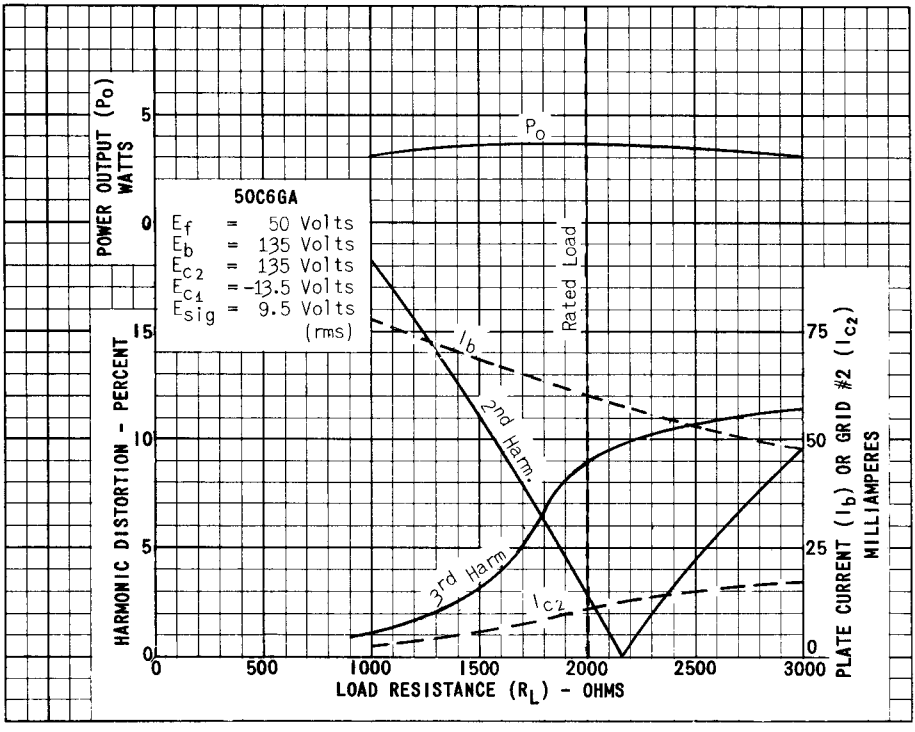
CONTINUED FROM PRECEDING PAGE

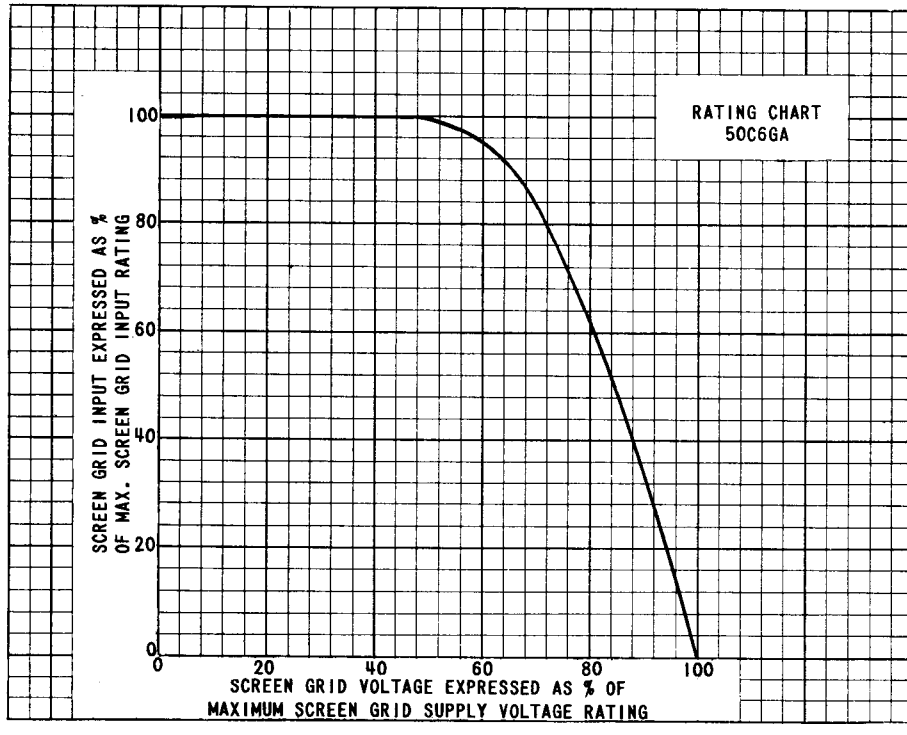
TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A_1 AMPLIFIER

HEATER VOLTAGE	50		VOLTS
HEATER CURRENT	0.15		AMP.
PLATE VOLTAGE	135	200	VOLTS
GRID #2 VOLTAGE	135	135	VOLTS
GRID #1 VOLTAGE	-13.5	-14	VOLTS
PEAK AF GRID #1 VOLTAGE	13.5	14	VOLTS
ZERO SIGNAL PLATE CURRENT	58	61	MA.
MAXIMUM SIGNAL PLATE CURRENT	60	66	MA.
ZERO SIGNAL GRID #2 CURRENT	3.5	2.2	MA.
MAXIMUM SIGNAL GRID #2 CURRENT	11.5	9	MA.
TRANSCONDUCTANCE	7 000	7 100	μMHOS
PLATE RESISTANCE (APPROX.)	9 300	18 300	OHMS
LOAD RESISTANCE	2 000	2 600	OHMS
MAXIMUM SIGNAL POWER OUTPUT	3.6	6	WATTS
TOTAL HARMONIC DISTORTION (APPROX.)	10	10	PERCENT




POWER OUTPUT (P_o) WATTS
HARMONIC DISTORTION - PERCENT
PLATE CURRENT (I_b) OR GRID #2 (I_{c2}) MILLIAMPERES
LOAD RESISTANCE (R_L) - OHMS
50C6GA
E_f = 50 Volts
E_b = 135 Volts
E_{c2} = 135 Volts
E_{c1} = -13.5 Volts
E_{sig} = 9.5 Volts (rms)
P_o
Rated Load
I_b
2nd Harm.
3rd Harm
I_{c2}
0
500
1000
1500
2000
2500
3000
5
0
15
10
5
0
75
50
25
0


RATING CHART
50C6GA
SCREEN GRID INPUT EXPRESSED AS % OF MAX. SCREEN GRID INPUT RATING
SCREEN GRID VOLTAGE EXPRESSED AS % OF MAXIMUM SCREEN GRID SUPPLY VOLTAGE RATING
100
80
60
40
20
0
0
20
40
60
80
100