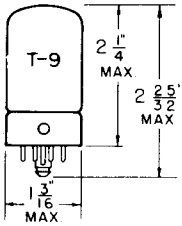
TUNG-SOL

BEAM PENTODE



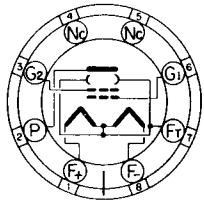
GLASS BULB

COATED FILAMENT

SERIES FILAMENT		PARALLEL FILAMENT	
E_f	APPLIED BETWEEN PINS 1 & 8	E_f	APPLIED BETWEEN PIN 7 AND PINS 1 & 8 TIED TOGETHER
E_{g1}	REFERRED TO PIN 8	E_{g1}	REFERRED TO PIN 7
2.8 VOLTS 110 MA.		1.4 VOLTS 220 MA.	

DC

A SHUNTING RESISTOR MUST BE CONNECTED BETWEEN PINS 1 AND 7 FOR SERIES-FILAMENT OPERATION. ITS VALUE SHOULD BE SUCH THAT THE VOLTAGE ACROSS THE SHUNTED SECTION IS EQUAL TO THE VOLTAGE BETWEEN PINS 7 AND 8. AN ADDITIONAL SHUNTING RESISTOR MAY BE NECESSARY BETWEEN PINS 1 AND 8 IF OTHER TUBES USED IN SERIES-FILAMENT ARRANGEMENT CONTRIBUTE TO THE FILAMENT CURRENT OF THE 3D6/1299.



BOTTOM VIEW
LOCK-IN 8 PIN BASE
6B8

ANY MOUNTING POSITION

THE 3D6/1299 IS A FILAMENTARY TYPE BEAM POWER AMPLIFIER FOR USE IN LIGHT AND PORTABLE EQUIPMENT USING THE LOCK-IN CONSTRUCTION. IN AUDIO SERVICE, IT WILL DELIVER RELATIVELY LARGE AMOUNTS OF AUDIO POWER. IN RF AMPLIFIER SERVICE IT WILL DELIVER A POWER OUTPUT OF 1.4 WATTS AT 50 MEGACYCLES.

DIRECT INTERELECTRODE CAPACITANCES

	WITH SHIELD[A]	WITHOUT SHIELD[B]	
GRID TO PLATE: (G_1 TO P)	0.3	0.3	μμf
INPUT: G_1 TO ($F+G_2+B_p+S$)	7.5	7.5	μμf
OUTPUT: P TO ($F+G_2+B_p+S$)	6.5	5.5	μμf

[A] WITH EXTERNAL SHIELD CONNECTED TO F-. PIN 5 CONNECTED TO FILAMENT CENTER TAP.

[B] PIN 5 CONNECTED TO FILAMENT CENTER TAP.

RATINGS

INTERPRETED ACCORDING TO RMA STANDARD M8-210

	SERIES FILAMENT	PARALLEL FILAMENT	
MAXIMUM FILAMENT VOLTAGE	3.5	1.75	VOLTS
MINIMUM FILAMENT VOLTAGE	2.8	1.4	VOLTS
MAXIMUM PLATE VOLTAGE	180	180	VOLTS
MAXIMUM GRID #2 VOLTAGE	135	135	VOLTS
MAXIMUM PLATE DISSIPATION	4.5	4.5	WATTS
MAXIMUM GRID #2 DISSIPATION	0.9	0.9	WATT
MAXIMUM CATHODE CURRENT	30	30	MA.

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CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

AF POWER AMPLIFIER - CLASS A_1

VALUES FOR SERIES-FILAMENT OPERATION WILL BE APPROXIMATELY THE SAME AS FOR PARALLEL-FILAMENT OPERATION.

FILAMENT VOLTAGE	1.4	1.4	1.4	VOLTS
FILAMENT CURRENT	220	220	220	MA.
PLATE VOLTAGE	90	135	150	VOLTS
GRID #2 VOLTAGE	90	90	90	VOLTS
GRID #1 VOLTAGE	-4.5	-4.5	-4.5	VOLTS
PEAK AF SIGNAL VOLTAGE	4.5	4.5	4.5	VOLTS
TRANSCONDUCTANCE	2 400	2 400	2 400	µMHOS
ZERO-SIGNAL PLATE CURRENT	9.5	9.8	9.9	MA.
ZERO-SIGNAL GRID #2 CURRENT	1.6	1.2	1.0	MA.
MAXIMUM SIGNAL PLATE CURRENT	8.5	9.8	10.2	MA.
MAXIMUM SIGNAL GRID #2 CURRENT	3.2	2	1.8	MA.
LOAD RESISTANCE	8 000	12 000	14 000	OHMS
TOTAL HARMONIC DISTORTION	5	5	5	PERCENT
POWER OUTPUT	270	500	600	MW.

RF POWER AMPLIFIER AT 50 MC - CLASS C

FILAMENT VOLTAGE	1.4	VOLTS
FILAMENT CURRENT	220	MA.
PLATE VOLTAGE	150	VOLTS
GRID #2 VOLTAGE	135	VOLTS
GRID #1 VOLTAGE (APPROX.)[C]	-20	VOLTS
PEAK RF GRID #1 VOLTAGE	55	VOLTS
PLATE CURRENT	23	MA.
GRID #2 CURRENT	6	MA.
GRID #1 CURRENT	1	MA.
TOTAL DC CATHODE CURRENT (NOT TO EXCEED 30 MA.)	30	MA.
RF POWER INPUT	0.25	WATT
RF POWER OUTPUT	1.4	WATTS

[C] OBTAINED FROM A FIXED SOURCE OR FROM THE DROP ACROSS A SUITABLE GRID RESISTOR.

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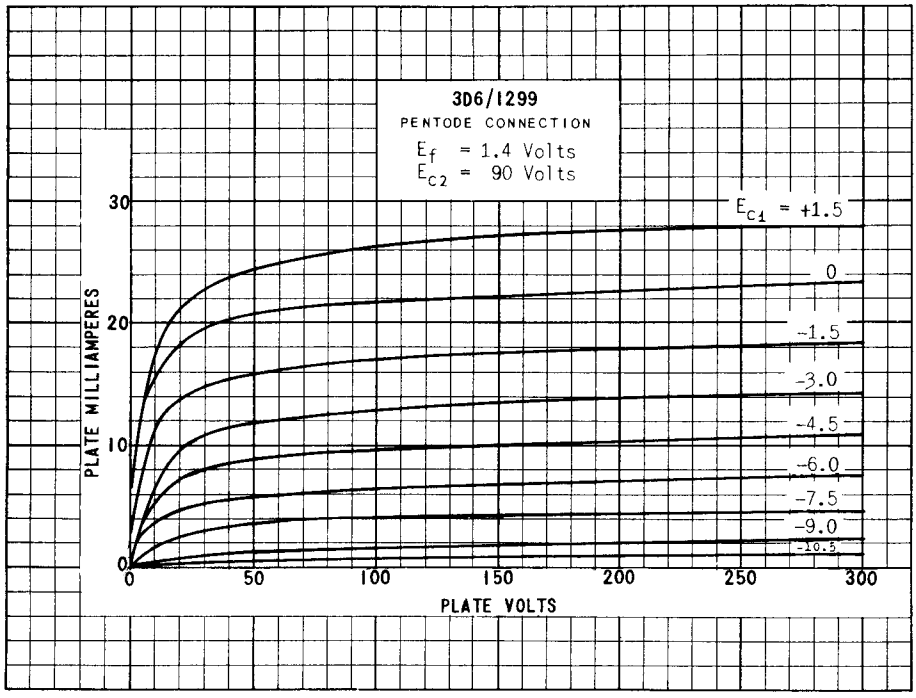

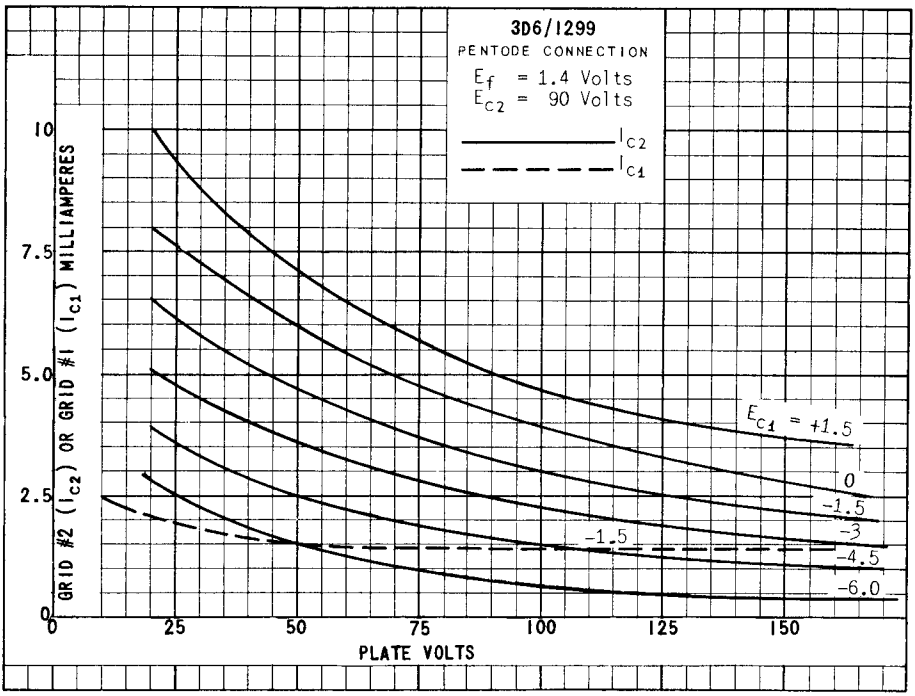

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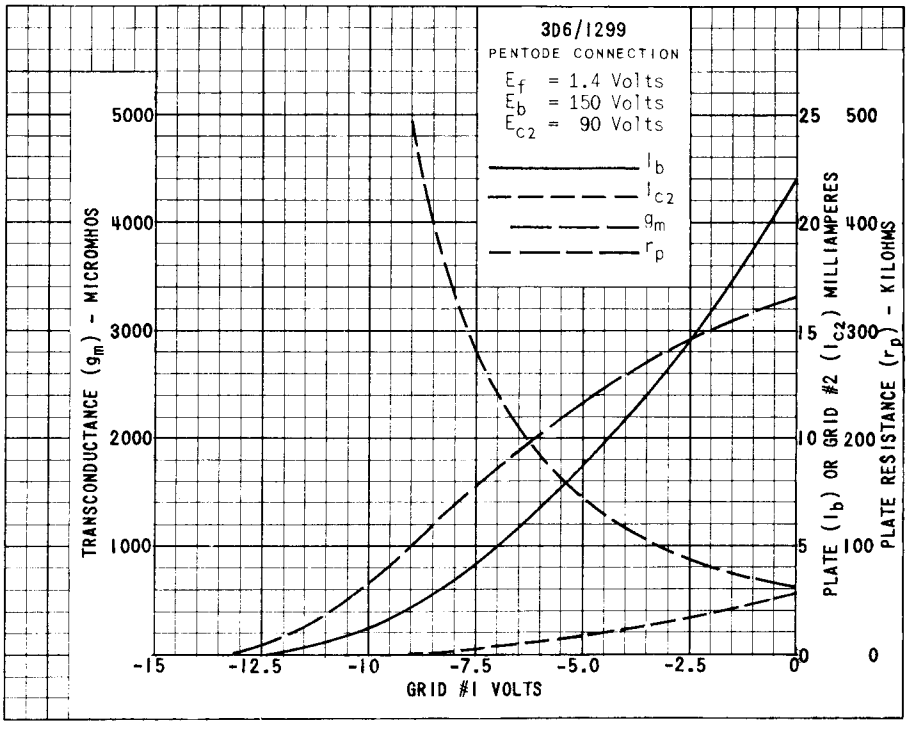
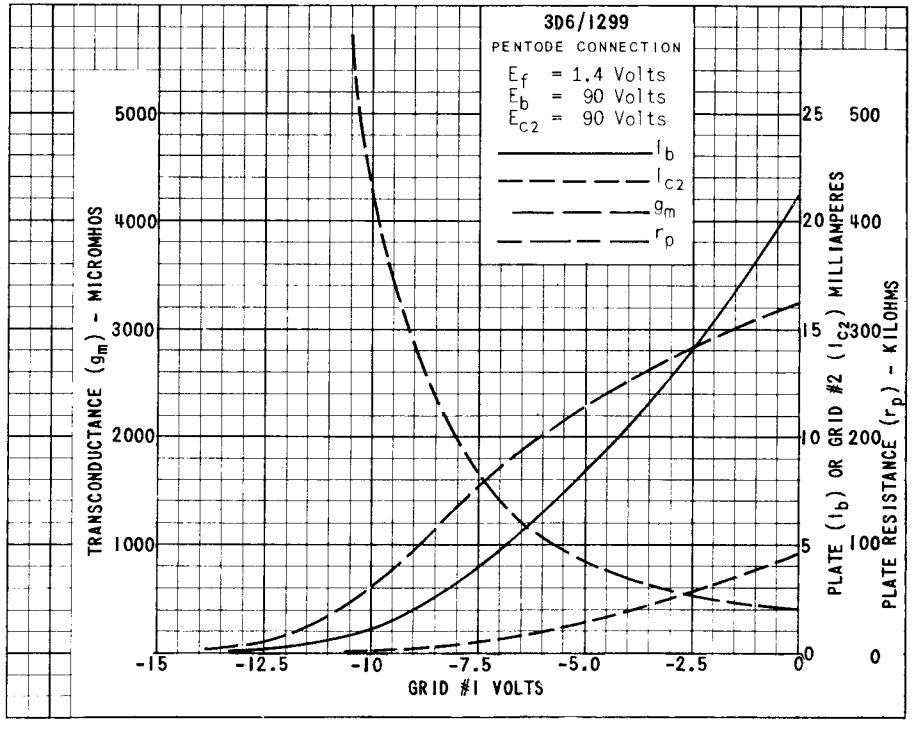
3D6/1299





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