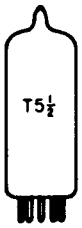
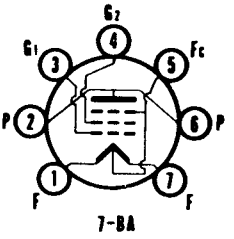


SYLVANIA TYPE 3S4

PENTODE POWER AMPLIFIER



MECHANICAL DATA

Bulb	T-5 ½, Outline 5-2
Base	Miniature Button 7-Pin
Basing	7BA
Mounting Position	Any

ELECTRICAL DATA

FILAMENT CHARACTERISTICS

	Series	Parallel[1]
Filament Voltage D C	2.8	1.4 Volts
Filament Current	50	100 Ma

MAXIMUM RATINGS (Design Center Values)

	Series	Parallel[1]
Plate Voltage	90	90 Volts
Screen Voltage	67.5	67.5 Volts
Cathode Current (Zero Signal)[2]	6	12 Ma

CHARACTERISTICS AND TYPICAL OPERATION

Class A_1 Amplifier	Series		Parallel[1]		
Plate Voltage	67.5	90	67.5	90	Volts
Grid No. 2 Voltage	67.5	67.5	67.5	67.5	Volts
Negative Grid Voltage	−7	−7	−7	−7	Volts
Peak Signal Voltage	7	7	7	7	Volts
Plate Current (Zero Signal)	6.0	6.1	7.2	7.4	Ma
Grid No. 2 Current (Zero Signal)	1.2	1.1	1.5	1.4	Ma
Transconductance	1400	1425	1550	1575	μmhos
Load Resistance	5000	8000	5000	8000	Ohms
Plate Resistance (approx.)	0.1	0.1	0.1	0.1	Megohm
Total Harmonic Distortion	12	13	10	12	Percent
Maximum Signal Power Output	160	235	180	270	Mw

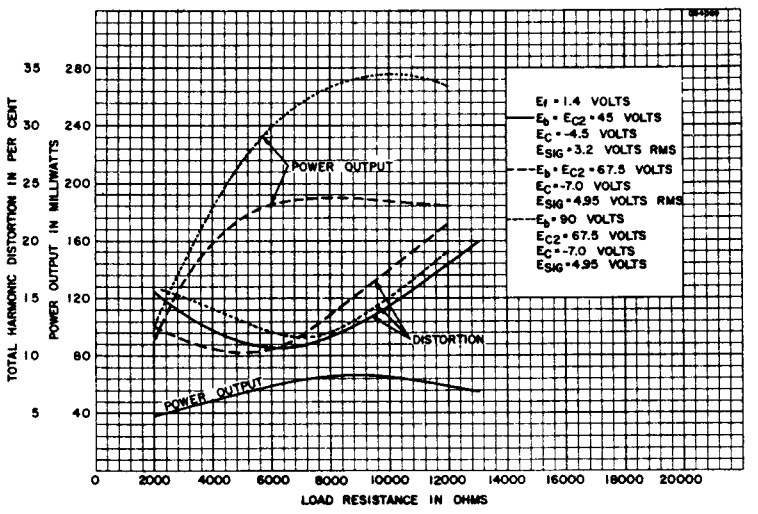
NOTES:

1. For parallel operation, tie pins 1 and 7. Negative end of filament connected to pin No. 5.
2. When series filament connections are used, a shunting resistor should be used across the negative filament section (pins 1 and 5) to limit cathode current to the value specified. If other tubes in a series filament string contribute to the filament current, another resistor should be connected between pins 1 and 7 to carry any excess current over the ratings.

APPLICATION

Sylvania Type 3S4 is a miniature power amplifier pentode designed for service in portable, battery operated equipment. The electrical characteristics of the 3S4 are similar to those of the 1S4. The Type 3S4, however, is designed for operation from either a 1.4 volt or 2.8 volt filament supply.

AVERAGE OPERATION CHARACTERISTICS



3S4 (Cont'd)

AVERAGE PLATE CHARACTERISTICS