



# Sylvania TYPE 22 SCREEN GRID RF AMPLIFIER

## CHARACTERISTICS

Filament Voltage DC . . . . .	3.3 Volts
Filament Current . . . . .	0.132 Ampere

### Direct Interelectrode Capacitances:

Grid to Plate (with tube shield) . . . . .	0.02 $\mu\mu\text{f}$
Input . . . . .	4.0 $\mu\mu\text{f}$
Output . . . . .	12.0 $\mu\mu\text{f}$
Maximum Over-all Length. . . . .	5 $\frac{1}{32}$ "
Maximum Diameter . . . . .	1 $\frac{13}{16}$ "
Bulb . . . . .	ST-14
Cap . . . . .	Small Metal
Base—Medium 4-Pin . . . . .	4-K

### Operating Conditions and Characteristics:

Filament Voltage . . . . .	3.3	3.3 Volts
Plate Voltage . . . . .	135	135 Volts
Grid Voltage . . . . .	-1.5	-1.5 Volts
Screen Voltage . . . . .	45	67.5 Volts Max.
Plate Current . . . . .	1.7	3.7 Ma.
Screen Current . . . . .	0.6	1.3 Ma. Max.
Plate Resistance . . . . .	725,000	250,000 Ohms
Mutual Conductance . . . . .	375	500 $\mu\text{mhos}$
Amplification Factor . . . . .	270	125

## CIRCUIT APPLICATION

Sylvania 22 is a filament type screen grid r-f amplifier. This tube was designed for use in dry cell battery operated receivers employing 3.3 volt filament tubes. It is used mainly as a replacement tube in older sets designed for this type, which employed Type 22's as radio frequency amplifiers in multi-stage circuits.

The tube may also be operated as an audio frequency amplifier, in which case the value of the plate-coupling resistor should be 0.1 to 0.25 megohm.