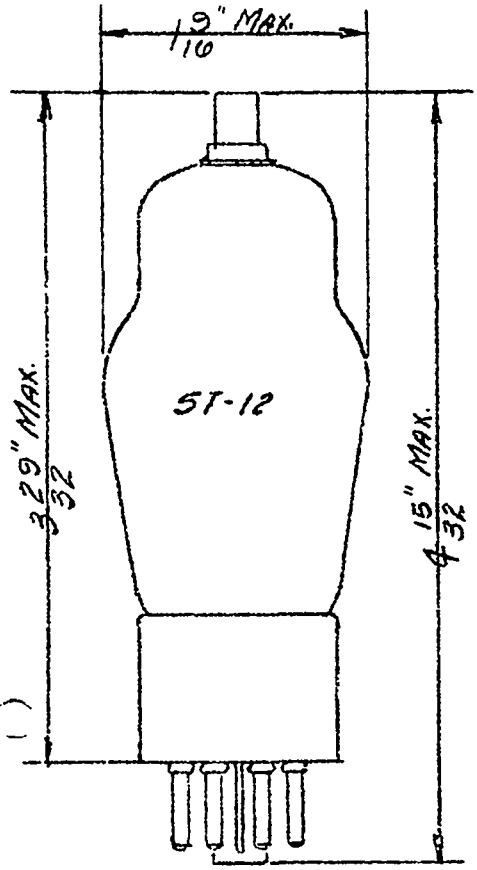
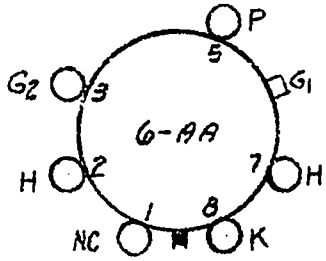
# TECHNICAL DATA




PIN ARRANGEMENT




BOTTOM VIEW

# ARCTURUS

## TYPE 6R6G

### REMOTE CUT-OFF PENTODE AMPLIFIER

| | | |
|---|---|---|
| Heater Voltage | 6.3 | Volts |
| Heater Current | 0.3 | Ampere |
| Plate Voltage | 1500 | (max)* |
| Screen Grid Voltage | 75 | (max) |
| Control Grid Voltage | (**) | |

### LOW VOLTAGE CHARACTERISTICS

| | | |
|---|---|---|
| Plate Voltage | 250 | Volts |
| Screen Grid Voltage | 100 | Volts |
| Control Grid Voltage | -3 | Volts |
| Plate Current | 7.0 | ma. |
| Screen Grid Current | 1.7 | ma. |
| Plate Resistance | 800,000 | ohms |
| Transconductance | 1450 | micromhos |
| Amplification Factor | 1160 | |
| Transconductance = 2 when control grid voltage = | -42.5 | Volts |

### DIRECT INTERELECTRODE CAPACITANCES

| | | | |
|---|---|---|---|
| Grid to plate | .007 | uuf | (max) |
| Input | 4.5 | uuf | |
| Output | 11.0 | uuf | |

* This is the plate supply voltage. The voltage effective at the plate will be this voltage minus the drop in the series resistor which should not be less than 100,000 ohms.

** When the grid bias is developed in the grid circuit the tube should not be operated without grid excitation. When the bias is developed in the cathode circuit the minimum value of cathode resistor should be 500 ohms.

### APPLICATION

The characteristics of Type 6R6G make it suitable for use as an amplifier of the output of a sweep oscillator such as the 6AD5G. Advantage is taken of the shape of its grid voltage - plate current curve to compensate for the non-linearity of the output of the sweep oscillator and produce a resultant linear sawtooth wave for cathode-ray oscillograph and television sweep circuits.

The 6R6G is especially insulated to withstand high surge voltages, but the plate dissipation must be limited by a series protective resistor.

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