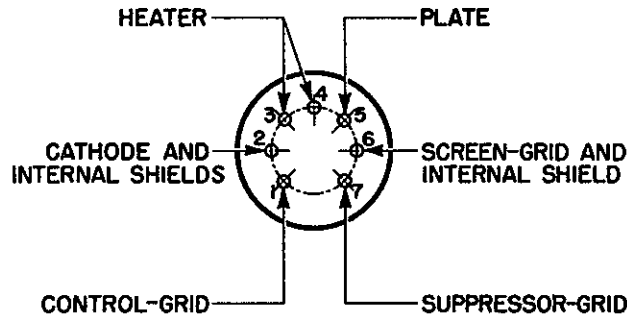
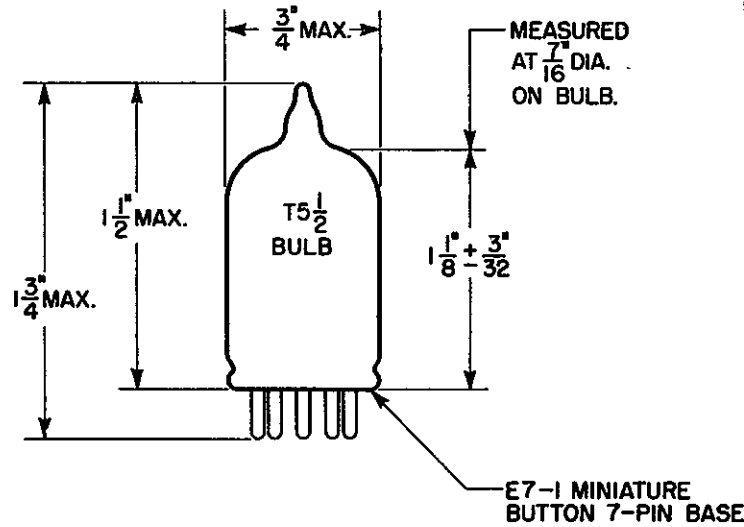


ADVANCE ELECTRON TUBE DATA SHEET

WESTERN ELECTRIC 415A ELECTRON TUBE

415A
 MINIATURE
 PENTODE
 UHF



DESCRIPTION

Miniature Suppressor-Grid Pentode

MOUNTING

This tube may be mounted in any position.

HEATER RATING

Heater Voltage, A-C or D-C	6.3 volts
Nominal Heater Current	150 milliamperes

MAXIMUM RATINGS (Design Center Values)

Plate Voltage	180 volts
Screen-Grid Voltage	140 volts
Positive Suppressor-Grid Voltage	27 volts
Plate Dissipation	1.7 watts
Screen-Grid Dissipation	0.75 watt
Cathode Current	18 milliamperes
Heater-Cathode Voltage	90 volts
Bulb Temperature	120 centigrade

OPERATING CONDITIONS AND CHARACTERISTICS

Plate Voltage	120	120	volts
Screen-Grid Voltage	120	120	volts
Suppressor-Grid Voltage	-3	0	volts
Control-Grid Voltage	-2	-2	volts
Plate Current	3.6	5.2	milliamperes
Screen-Grid Current	4.8	3.5	milliamperes
Transconductance, Control-Grid	1850	3200	μmhos
Transconductance, Suppressor-Grid	810	470	μmhos



CONTROL-GRID PLATE CURRENT CUT-OFF CHARACTERISTICS

Plate Voltage	120 volts
Screen-Grid Voltage	120 volts
Suppressor-Grid Voltage	0 volts
Control-Grid Voltage (approximate) for Plate Current of 10 Microamperes	-7.5 volts

SUPPRESSOR-GRID PLATE CURRENT CUT-OFF CHARACTERISTICS

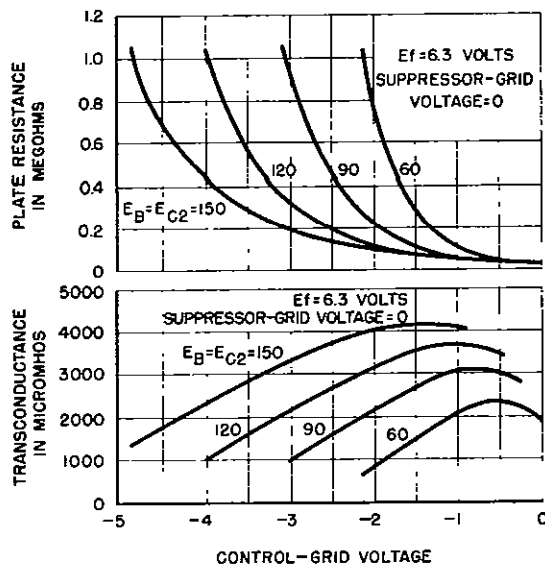
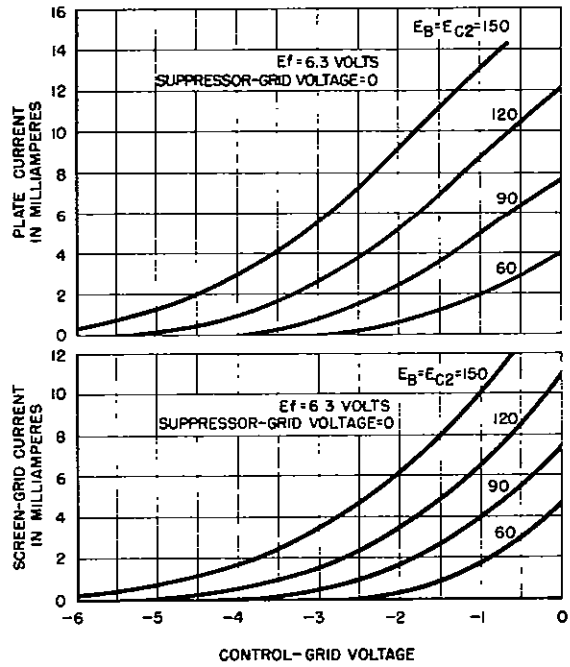
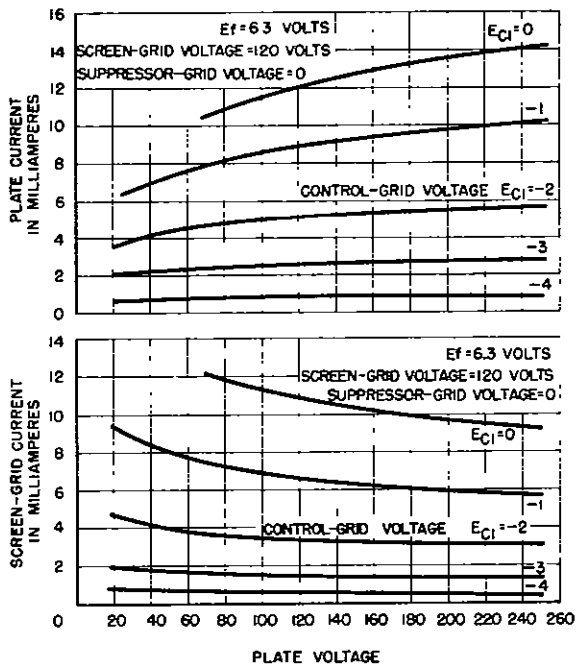
Plate Voltage	120 volts
Screen-Grid Voltage	120 volts
Control-Grid Voltage	-2 volts
Suppressor-Grid Voltage (approximate) for Plate Current of 10 Microamperes	-10 volts

INTERELECTRODE CAPACITANCES (With RMA No. 316 Shield)

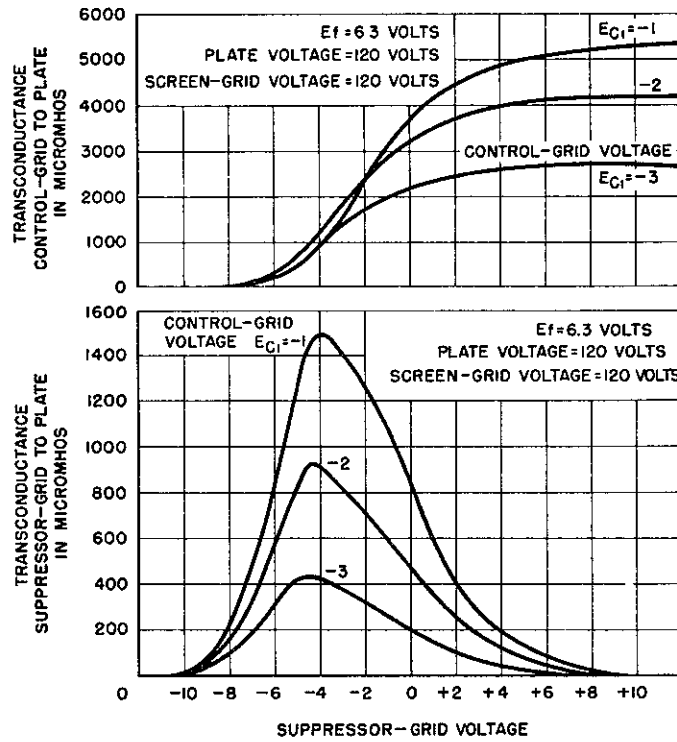
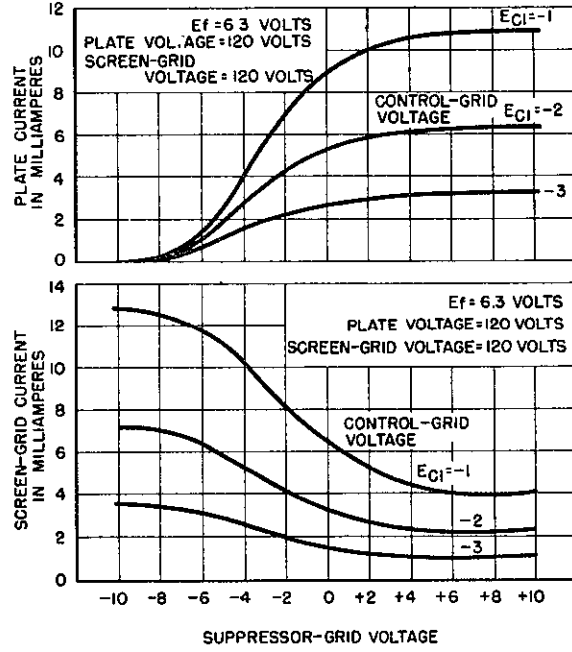
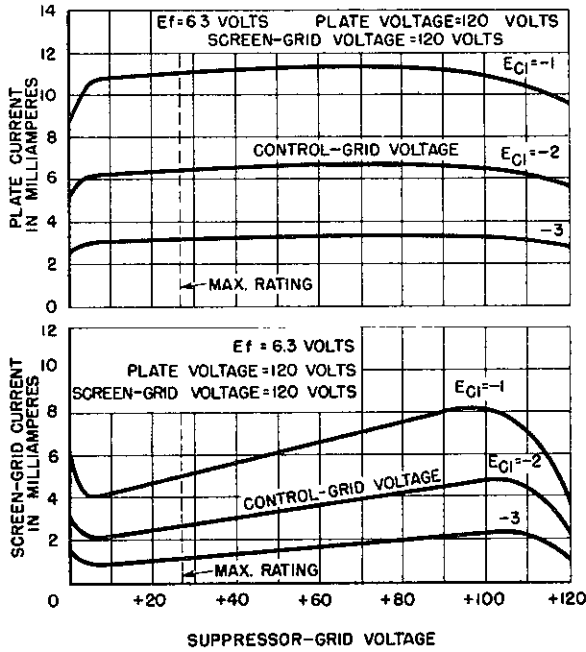
Plate to Control-Grid, Maximum	*0.014 μ f
Input (G1 to Heater, Cathode, G2 & G3)	*3.9 μ f
Output (Plate to Heater, Cathode, G2 & G3)	*3.0 μ f
Control-Grid to Suppressor-Grid	*0.1 μ f

*External shield connected to cathode-pin #2.

NORMAL PENTODE CHARACTERISTICS



SUPPRESSOR-GRID CHARACTERISTICS



Western Electric