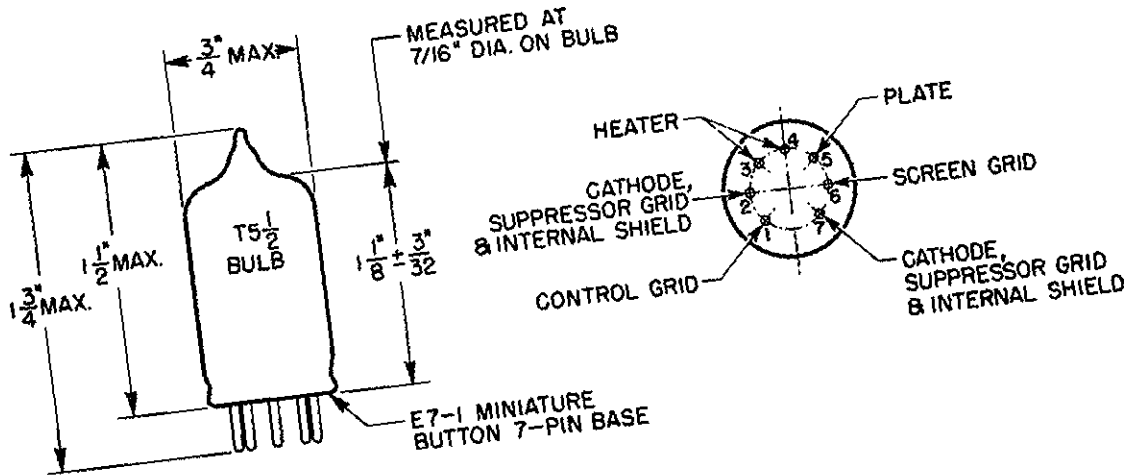


ADVANCE ELECTRON TUBE DATA SHEET
WESTERN ELECTRIC 414A ELECTRON TUBE

414A
MINIATURE
PENTODE



DESCRIPTION

The 414A is a miniature pentode with an indirectly heated cathode.

MAXIMUM RATINGS (Design Center Values)

Plate Voltage	180 volts
Screen-Grid Voltage	140 volts
Plate Dissipation	1.7 watts
Screen-Grid Dissipation	0.5 watt
Cathode Current	12 milliamperes
Heater Cathode Voltage	90 volts
Bulb Temperature	120° centigrade

GENERAL CHARACTERISTICS

ELECTRICAL DATA

Heater Voltage, A-C or D-C	6.3 volts	
Heater Current	150 milliamperes	
Direct Interelectrode Capacitances		
Plate to Grid, Maximum	Without External Shield	With External Shield (RMA #316)
Input	0.02	*0.012 uuf
Output	4.1	*4.3 uuf
	2.0	*2.9 uuf

MECHANICAL DATA

Cathode	Coated Unipotential
Bulb	T5-1/2
Base	Miniature Button, 7-pin
Mounting Position	Any

*External shield (RMA #316) connected to cathodes-pins #2 and #7.
Operating Conditions and Characteristics on Reverse Side

Western Electric

OPERATING CONDITIONS AND CHARACTERISTICS

Plate Voltage	60 volts
Screen-Grid Voltage	60 volts
Cathode Resistor	510 ohms
Plate Current	4.2 milliamperes
Screen-Grid Current	1.5 milliamperes
Plate Resistance	0.35 megohm
Transconductance	2750 micromhos
Grid Voltage (approximate) for 10 Microamperes Plate Current	-9.5 volts

