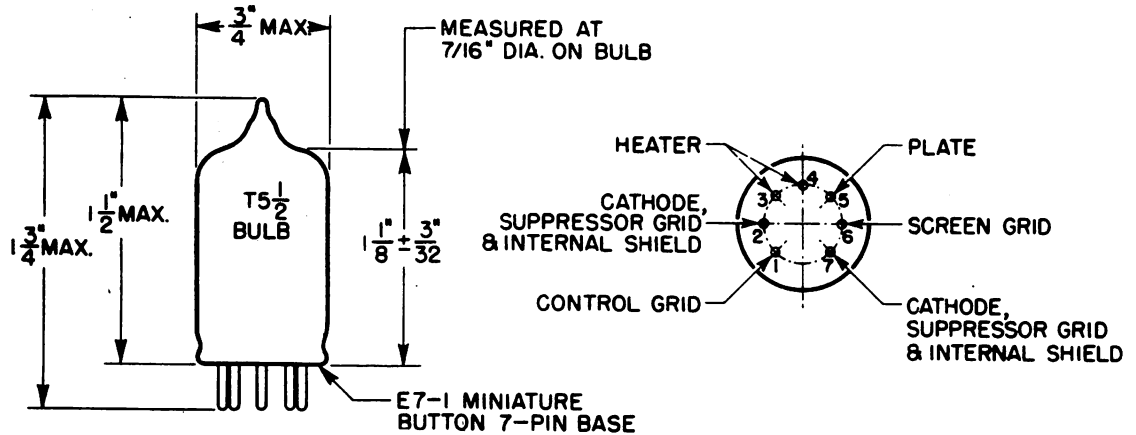


ADVANCE ELECTRON TUBE DATA SHEET

WESTERN ELECTRIC 414A ELECTRON TUBE



**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 .....	Without External Shield	With External Shield	
		(RMA #316)	
Plate to Grid, Maximum .....	0.02	*0.012	uuf
Input .....	4.1	*4.3	uuf
Output .....	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



**OPERATING CONDITIONS AND CHARACTERISTICS**

Plate Voltage .....	60 volts
Screen-Grid Voltage .....	60 volts
Cathode Resistor .....	510 ohms
Plate Current .....	4.3 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

