

**7AF7**

**Description and Rating**

**TWIN TRIODE**

**GENERAL DESCRIPTION**

Principal Application: The 7AF7 is a medium-mu twin triode designed for use as a voltage amplifier

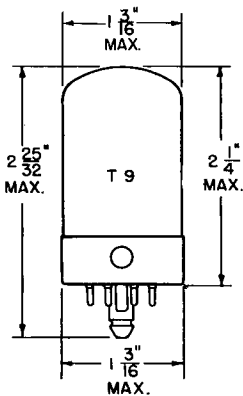
Cathodes: . . . . . Coated Unipotential  
 Heater Voltage (A-C or D-C) . . . . . 6.3 Volts  
 Heater Current . . . . . 0.3 Ampere  
 Envelope: . . . . . T-9 Glass  
 Base: . . . . . DG-I Locking-In 8-Pin  
 Mounting Position: . . . . . Any

or oscillator. Except for heater rating the 7AF7 and the 14AF7 are identical.

Direct Interelectrode Capacitances: \*

Grid to Plate (Each Section) . . . . .	2.3	$\mu\mu\text{f}$
Input (Each Section) . . . . .	2.2	$\mu\mu\text{f}$
Output (Each Section) . . . . .	1.6	$\mu\mu\text{f}$
Grid Number 1 to Grid Number 2 (Max) . . . . .	0.2	$\mu\mu\text{f}$
Plate Number 1 to Plate Number 2 (Max) . . . . .	0.6	$\mu\mu\text{f}$
Grid Number 1 to Plate Number 2 (Max) . . . . .	0.06	$\mu\mu\text{f}$
Grid Number 2 to Plate Number 1 (Max) . . . . .	0.1	$\mu\mu\text{f}$

**PHYSICAL DIMENSIONS**

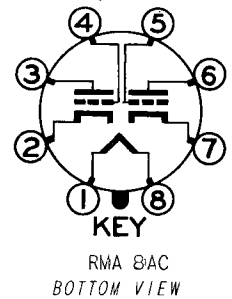


RMA 9-30

**TERMINAL CONNECTIONS**

- Pin 1 - Heater
- Pin 2 - Cathode (Section Number 2)
- Pin 3 - Plate (Section Number 2)
- Pin 4 - Grid (Section Number 2)
- Pin 5 - Grid (Section Number 1)
- Pin 6 - Plate (Section Number 1)
- Pin 7 - Cathode (Section Number 1)
- Pin 8 - Heater

**BASING DIAGRAM**



**DESIGN CENTER VALUES:**

Plate Voltage . . . . .	300	Volts
Plate Dissipation (Per Plate) . . . . .	2.5	Watts
Grid Bias Voltage . . . . .	0	Volts
Peak Heater-Cathode Voltage . . . . .	90	Volts

**MAXIMUM RATINGS**

**CHARACTERISTICS AND TYPICAL OPERATION**

**CLASS A AMPLIFIER: EACH SECTION**

Plate Voltage . . . . .	100	100	250	Volts
Grid Voltage . . . . .	0	-3.0	-10	Volts
Cathode-Bias Resistor . . . . .	-	600	1100	Ohms
Plate Current . . . . .	10.6	5.0	9.0	Milliamperes
Transconductance . . . . .	2600	1900	2100	Micromhos
Amplification Factor . . . . .	17	16	16	
Plate Resistance . . . . .	6500	8400	7600	Ohms

\* Without external shield.

Tube Department  
**GENERAL  ELECTRIC**  
*Schenectady, N. Y.*