

7F8

Description and Rating

TWIN TRIODE

GENERAL DESCRIPTION

Principal Application: The 7F8 is a twin triode designed for use as a grounded-grid radio-frequency

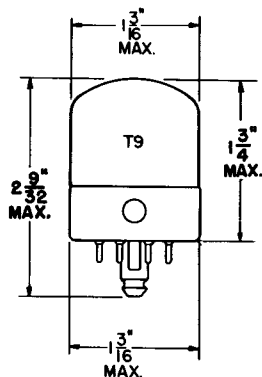
amplifier or as a frequency converter at frequencies up to 300 megacycles.

Cathode: Coated Unipotential
 Heater Voltage (A-C or D-C) 6.3 Volts
 Heater Current 0.3 Ampere
 Envelope: T-9 Glass
 Base: DB-1 Locking-In 8-Pin
 Mounting Position: Any

Direct Interelectrode Capacitances: *
 (Per Section)

Grid to Plate	1.2	μf
Grid to Cathode	2.6	μf
Plate to Cathode	1.4	μf
Heater to Cathode **	2.6	μf
Grid to Grid	0.1	μf
Plate to Plate (Max)	0.5	μf

PHYSICAL DIMENSIONS

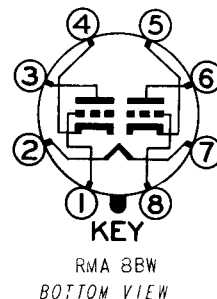


RMA 9-32

TERMINAL CONNECTIONS

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

BASING DIAGRAM



MAXIMUM RATINGS

DESIGN CENTER VALUES: EACH SECTION

Plate Voltage	300	Volts
Plate Dissipation (Total for Both Sections)	3.5	Watts
Grid Voltage (Positive Bias Value)	0	Volts
Peak Heater-Cathode Voltage	90	Volts

CHARACTERISTICS AND TYPICAL OPERATION

CLASS A₁ AMPLIFIER: EACH SECTION

Plate Voltage	250	Volts
Cathode-Bias Resistor#	500	Ohms
Amplification Factor	48	
Plate Resistance (Approximate)	14500	Ohms
Transconductance	3300	Micromhos
Plate Current	6.0	Milliamperes
Grid Bias Voltage ##	-11	Volts

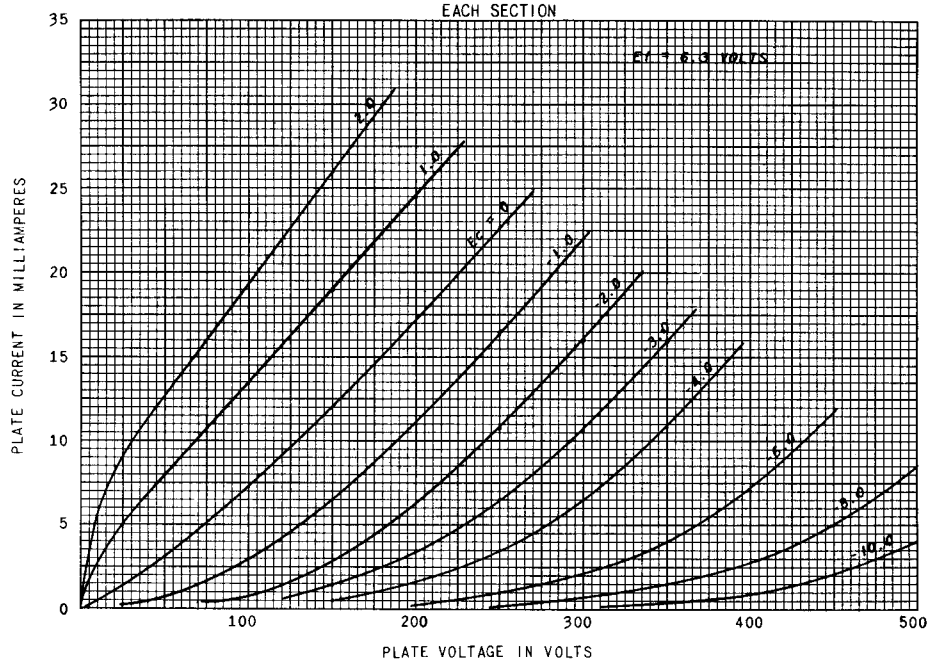
* With external shield connected to cathode.

** With external shield connected to ground.

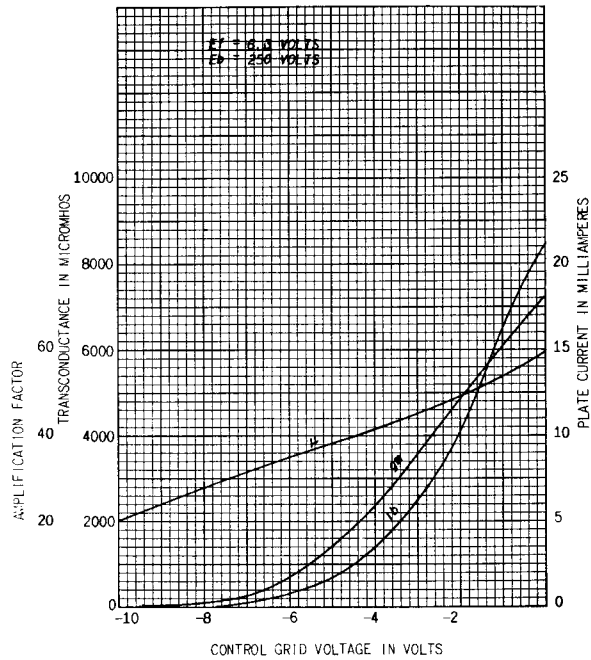
The d-c resistance in the grid circuit, under rated maximum conditions, should not exceed 0.5 megohm for cathode-bias operation.

For 10 microamperes plate current.

AVERAGE PLATE CHARACTERISTICS



AVERAGE CHARACTERISTICS



Tube Department



Schenectady, N. Y.