

**6SH7**

**Description and Rating**

**RADIO-FREQUENCY-AMPLIFIER PENTODE**

**GENERAL DESCRIPTION**

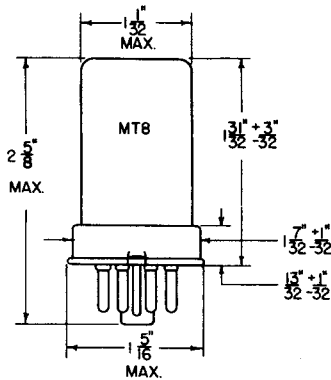
Principal Application: The type 6SH7 is a sharp cut-off amplifier pentode designed for use as a high-gain radio-frequency or intermediate-frequency

Cathode: . . . . . Coated Unipotential  
 Heater Voltage (A-C or D-C) . . . . . 6.3 Volts  
 Heater Current . . . . . 0.3 Ampere  
 Envelope: . . . . . MT-8 Metal Shell  
 Base: . . . . . B8-21 Small Wafer Octal 8-Pin, Phenolic

amplifier. The 6SH7 is not recommended for use as a high-gain audio amplifier because undesirable hum may be encountered.

Mounting Position: . . . . . Any  
 Direct Interelectrode Capacitances: \*  
 Grid to Plate (Max) . . . . . 0.003  $\mu\mu\text{f}$   
 Input . . . . . 8.5  $\mu\mu\text{f}$   
 Output . . . . . 7.0  $\mu\mu\text{f}$

**PHYSICAL DIMENSIONS**

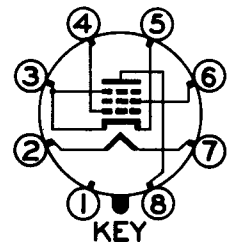


RMA 8-1

**TERMINAL CONNECTIONS**

- Pin 1 - Shell and Internal Shield
- Pin 2 - Heater
- Pin 3 - Cathode and Grid Number 3
- Pin 4 - Grid Number 1
- Pin 5 - Cathode
- Pin 6 - Grid Number 2 (Screen)
- Pin 7 - Heater
- Pin 8 - Plate

**BASING DIAGRAM**



RMA 8BK  
BOTTOM VIEW

**MAXIMUM RATINGS**

	Design Center	Absolute	
Plate Voltage . . . . .	300 . . . . .	330 . . . . .	Volts
Screen (Grid Number 2) Voltage . . . . .	150 . . . . .	165 . . . . .	Volts
Screen Supply Voltage . . . . .	300 . . . . .	330 . . . . .	Volts
Grid Bias Voltage . . . . .	Never Positive		
Plate Dissipation . . . . .	3.0 . . . . .	3.3 . . . . .	Watts
Screen Dissipation . . . . .	0.70 . . . . .	0.77 . . . . .	Watts
D-C Heater-Cathode Voltage . . . . .	90 . . . . .	100 . . . . .	Volts

**CHARACTERISTICS AND TYPICAL OPERATION**

**CLASS A AMPLIFIER**

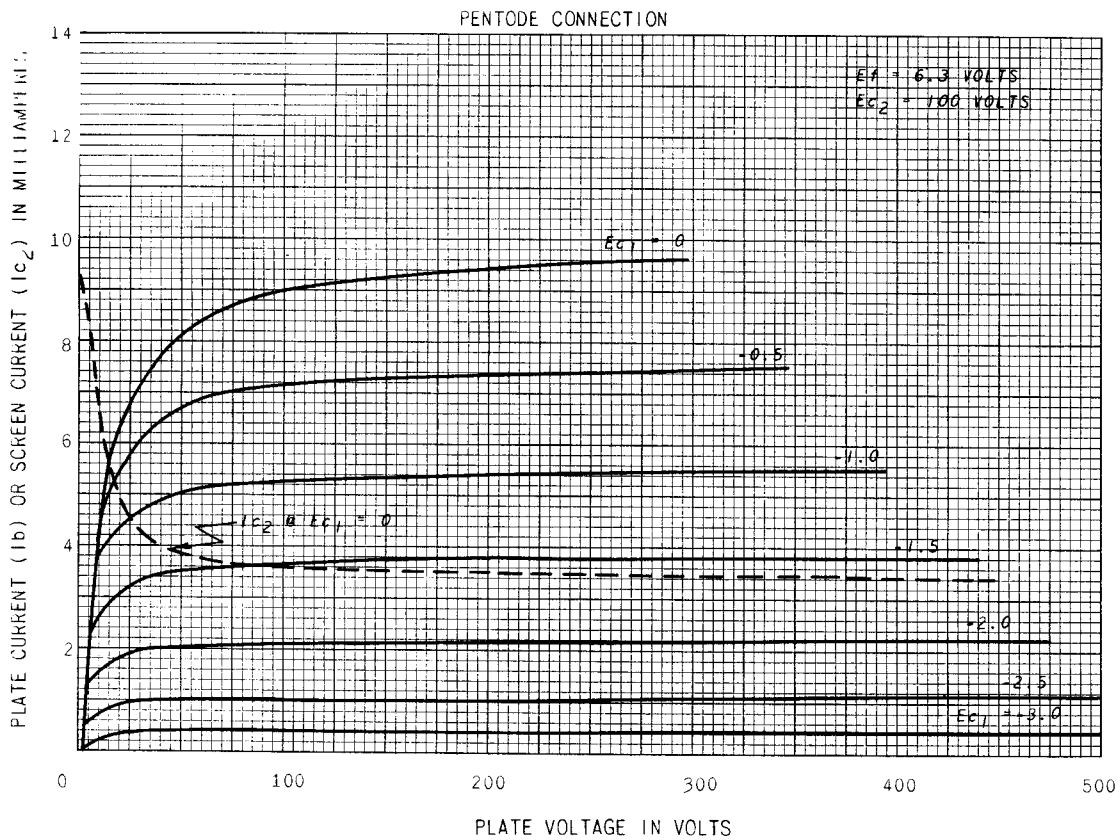
Heater Voltage . . . . .	6.3 . . . . .	6.3 . . . . .	Volts
Plate Voltage . . . . .	100 . . . . .	250 . . . . .	Volts
Screen Grid Voltage . . . . .	100 . . . . .	150 . . . . .	Volts
Grid Bias Voltage . . . . .	-1 . . . . .	-1 . . . . .	Volt
Plate Resistance (Approx) . . . . .	0.35 . . . . .	0.9 . . . . .	Megohm
Transconductance . . . . .	4000 . . . . .	4900 . . . . .	Micromhos
Grid Bias Voltage **. . . . .	-4 . . . . .	-5.5 . . . . .	Volts
Plate Current . . . . .	5.3 . . . . .	10.8 . . . . .	Milliamperes
Screen Current . . . . .	2.1 . . . . .	4.1 . . . . .	Milliamperes

(For notes see page 2)

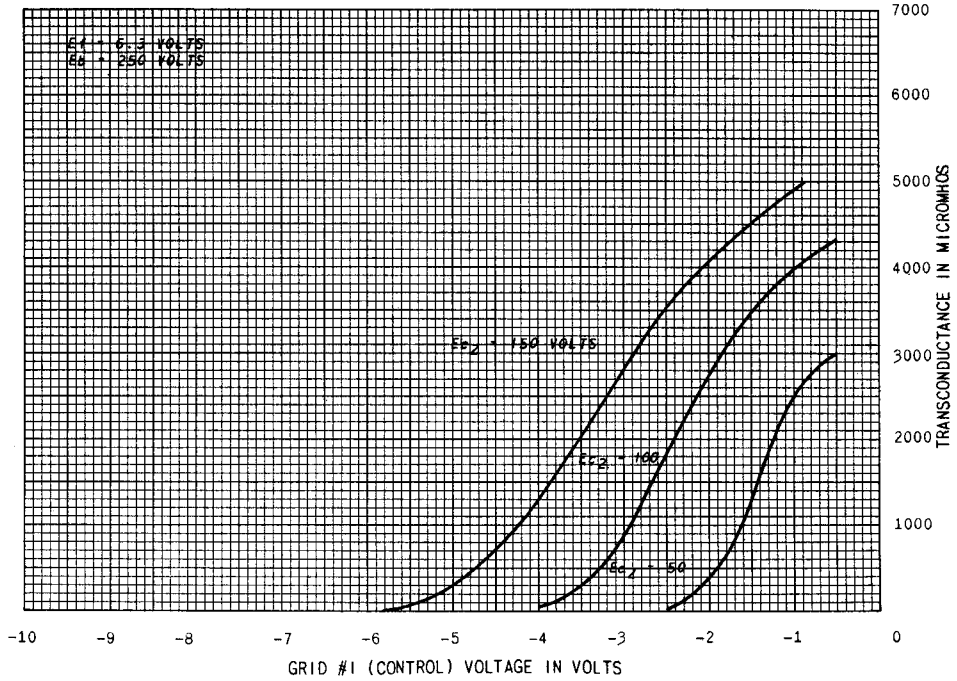
\* Measured with shell and internal shield connected to cathode.

\*\* Approximate values for plate current of 10 microamperes.

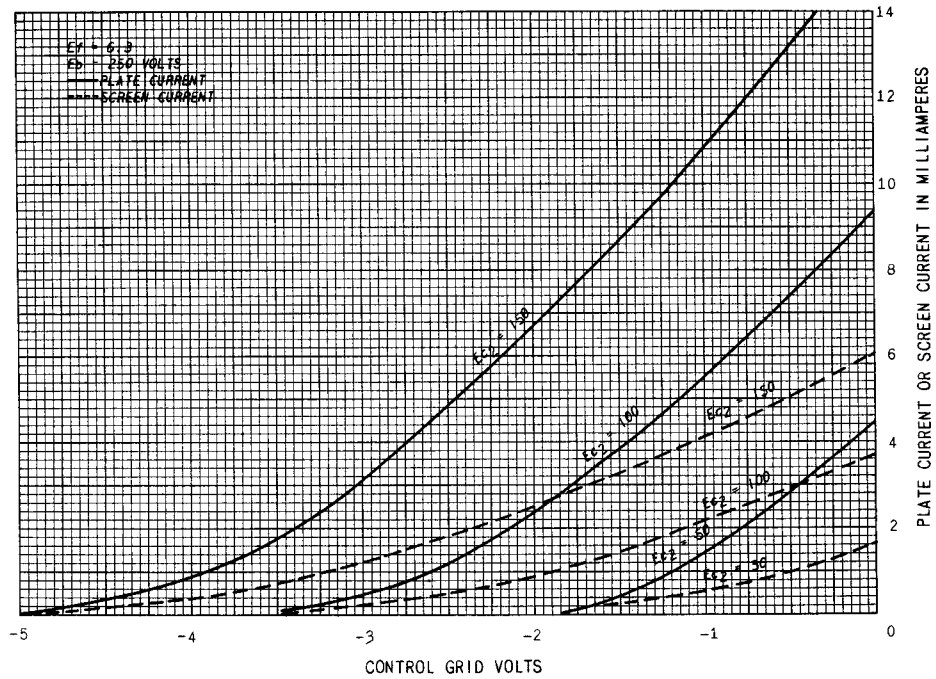
### AVERAGE PLATE CHARACTERISTICS



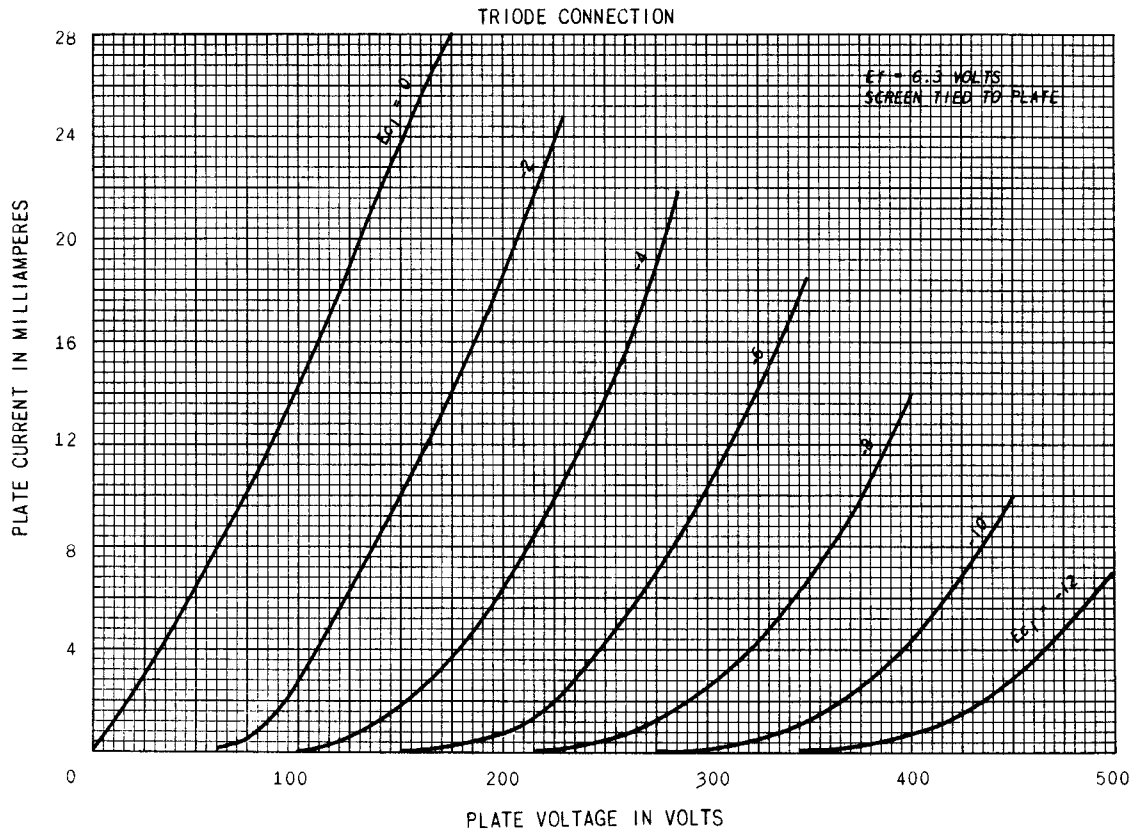
AVERAGE CHARACTERISTICS



AVERAGE CHARACTERISTICS



### AVERAGE PLATE CHARACTERISTICS



Electronics Department



Schenectady, N. Y.