



6SK7-12SK7

Description and Rating

PENTODE

The 6SK7 and 12SK7 are remote-cutoff pentodes which are identical except for heater ratings. Each type is designed for use as a high-gain radio-frequency or intermediate-frequency amplifier in radio receivers. Because of its remote-cutoff characteristic, this type will handle large signal voltages without cross-modulation or modulation-distortion and is suitable for use in receivers which employ automatic-volume-control.

GENERAL

Cathode - Coated Unipotential			
Heater Voltage, A-C or D-C	6SK7	12SK7	Volts
Heater Current	6.3	12.6	
Envelope - MT-8, Metal Shell	0.3	0.15	Ampere
Base - B8-21, Small Wafer Octal 8-Pin			
Mounting Position - Any			

Direct Interelectrode Capacitances *			
Grid-Number 1 to Plate, maximum		0.003	$\mu\mu\text{f}$
Input		6.0	$\mu\mu\text{f}$
Output		7.0	$\mu\mu\text{f}$

MAXIMUM RATINGS

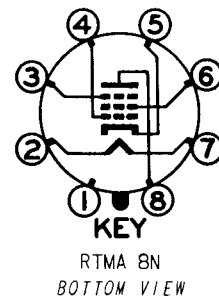
DESIGN-CENTER VALUES			
Plate Voltage	300		Volts
Screen-Supply Voltage	300		Volts
Screen Voltage - See Screen Rating Chart			
Positive D-C Grid-Number 1 Voltage	0		Volts
Plate Dissipation	4.0		Watts
Screen Dissipation	0.4		Watt
Heater-Cathode Voltage			
Heater Positive with Respect to Cathode	90		Volts
Heater Negative with Respect to Cathode	90		Volts

CHARACTERISTICS AND TYPICAL OPERATION

CLASS A ₁ AMPLIFIER			
Plate Voltage	100	250	Volts
Suppressor Voltage †	0	0	Volts
Screen Voltage	100	100	Volts
Grid-Number 1 Voltage	-1	-3	Volts
Plate Resistance, approximate	0.12	0.8	Megohm
Transconductance	2350	2000	Micromhos
Plate Current	13	9.2	Milliamperes
Screen Current	4.0	2.6	Milliamperes
Grid-Number 1 Voltage, approximate,			
G _m = 10 Micromhos	-35	-35	Volts

* With pin 1 connected to pin 5.
† Pin 3 connected to pin 5 at socket.

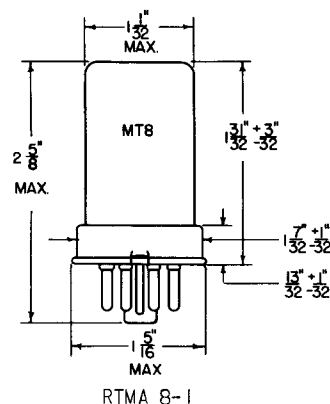
BASING DIAGRAM



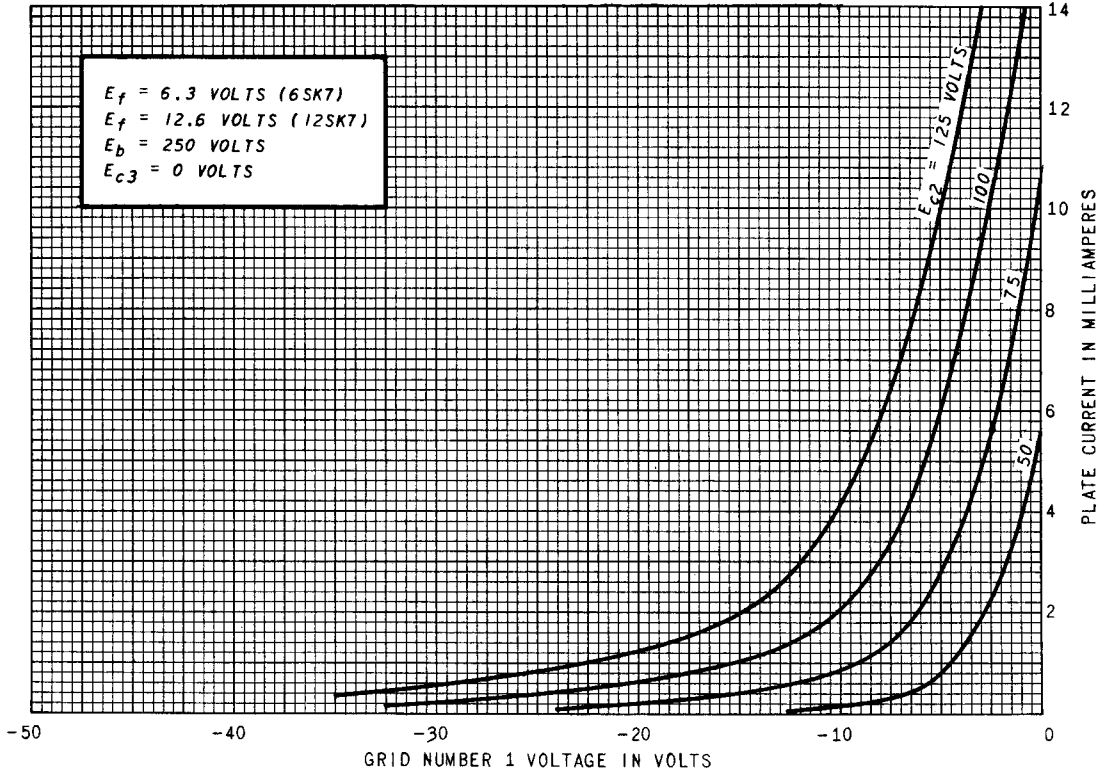
TERMINAL CONNECTIONS

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

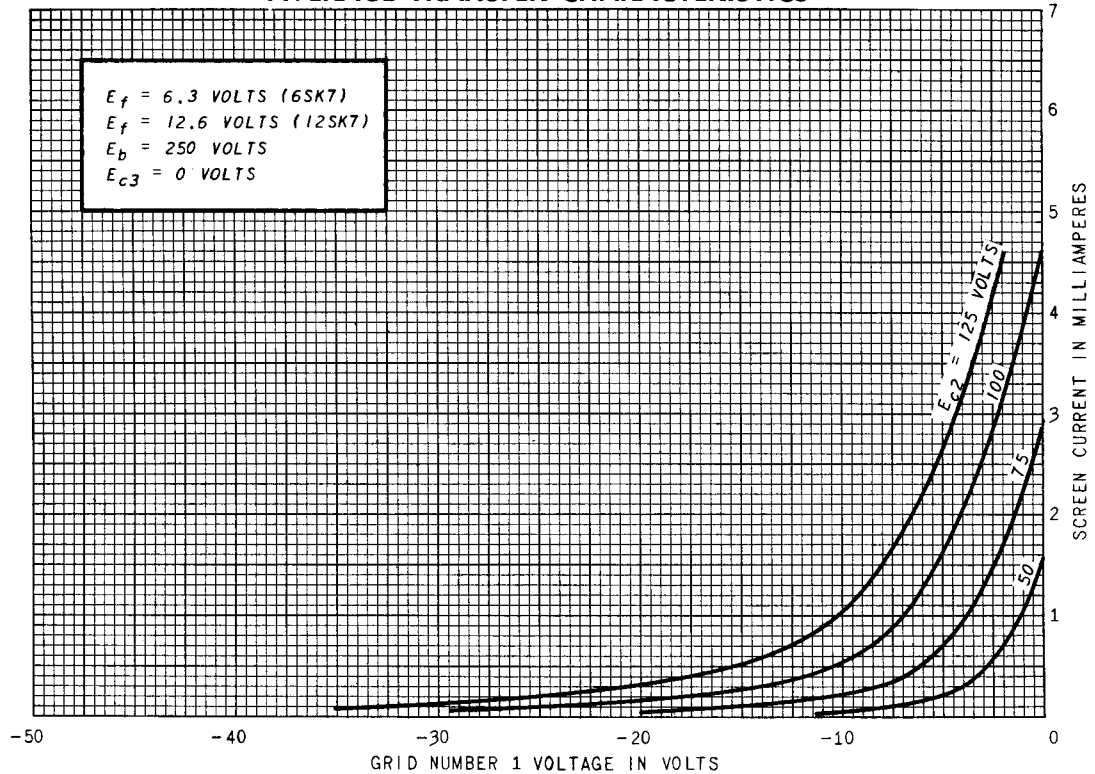
PHYSICAL DIMENSIONS



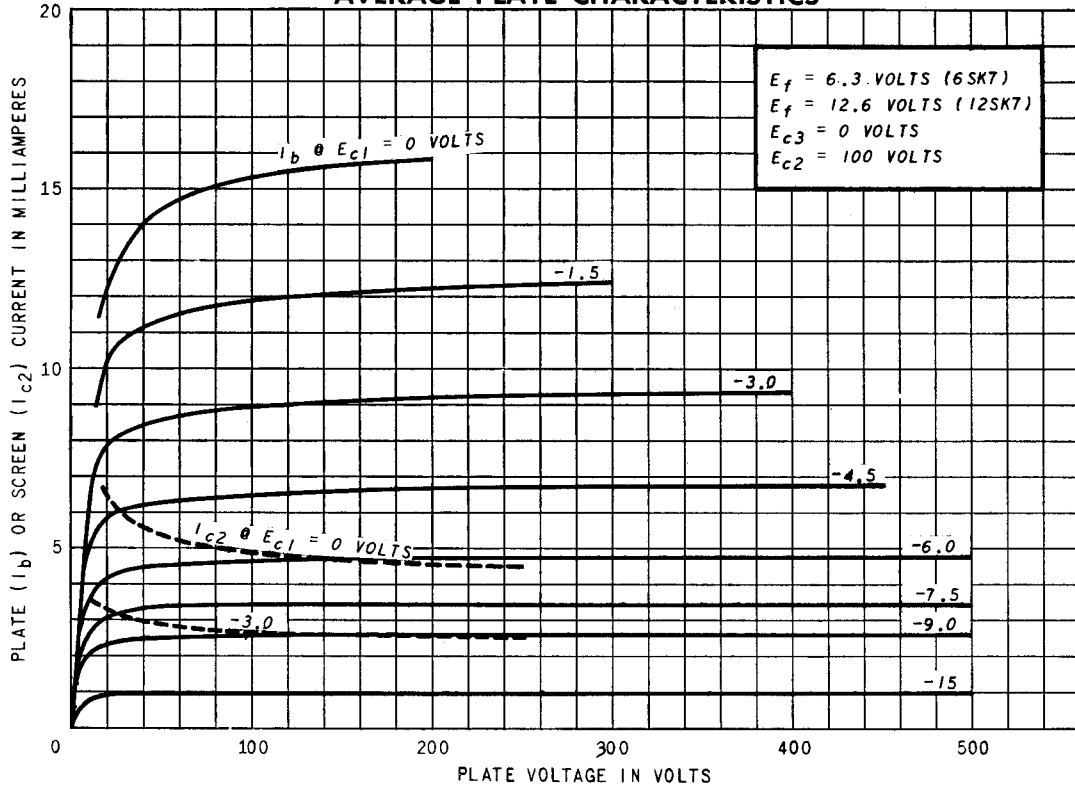
AVERAGE TRANSFER CHARACTERISTICS



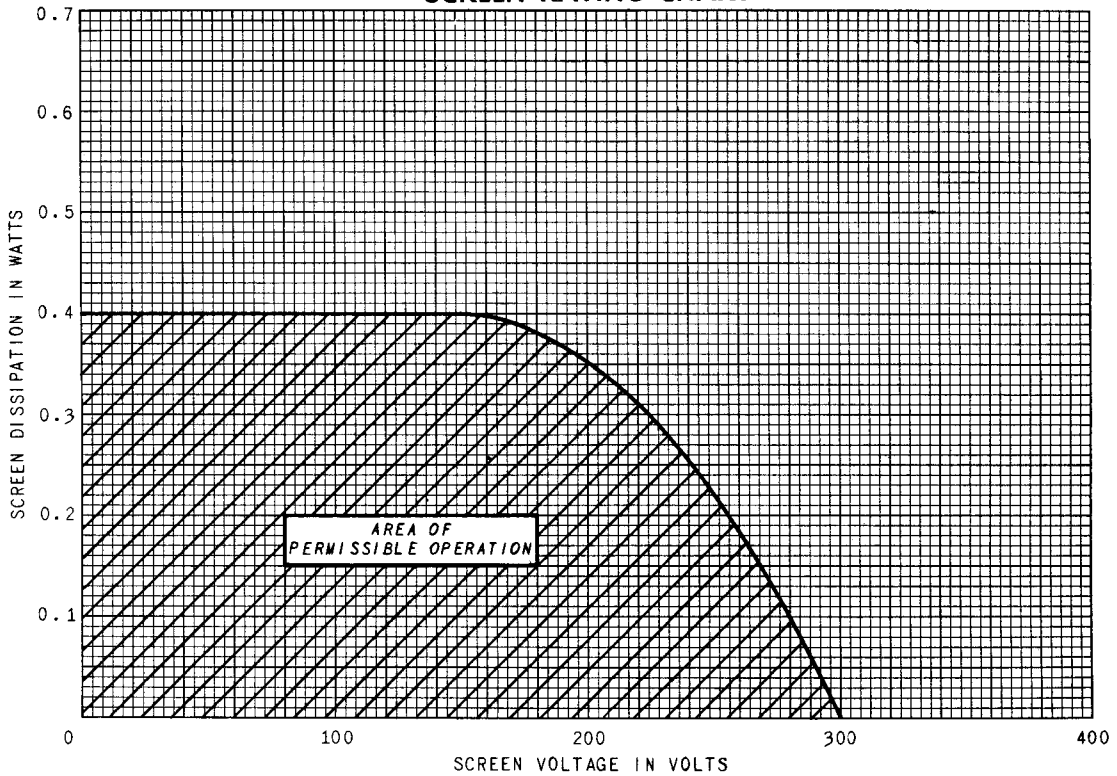
AVERAGE TRANSFER CHARACTERISTICS



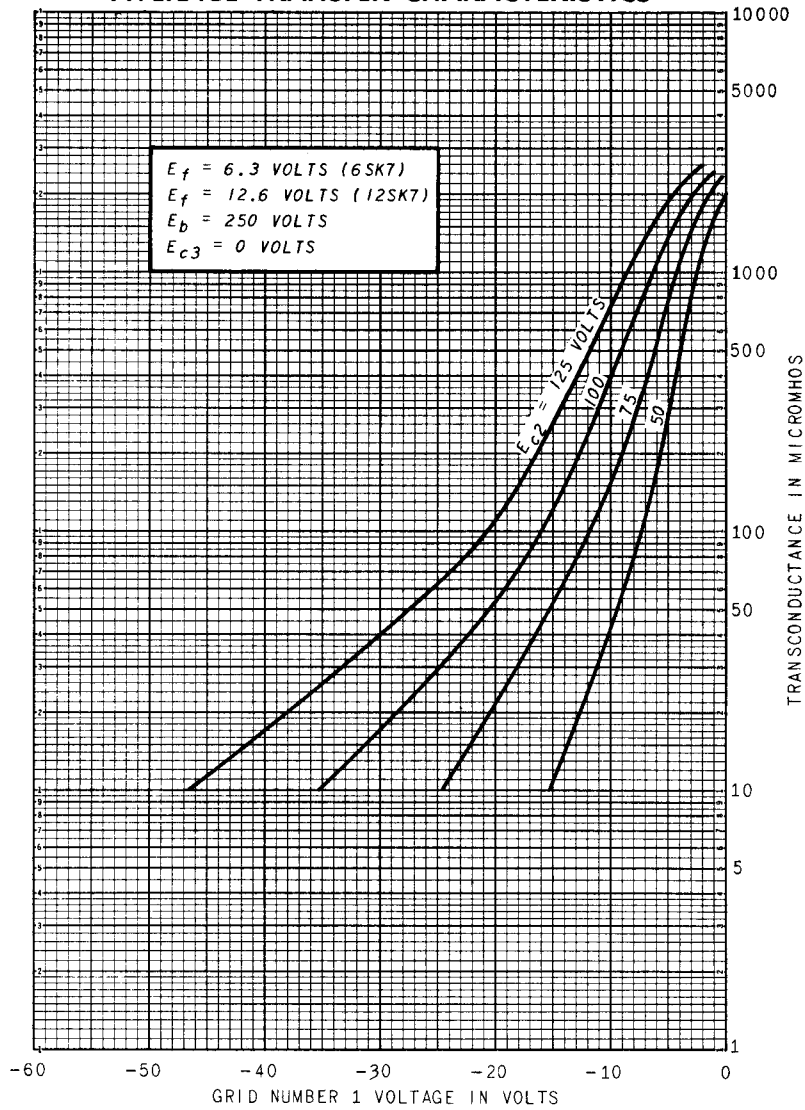
AVERAGE PLATE CHARACTERISTICS



SCREEN RATING CHART



AVERAGE TRANSFER CHARACTERISTICS



TUBE DEPARTMENT



Schenectady 5, N. Y.