Electronic TUBE

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

	6SK7	12SK7	
Heater Voltage, A-C or D-C	6.3	12.6	Volts
Heater Current	0.3	0.15	Ampere

Envelope - MT-8, Metal Shell
Base - B8-21, Small Wafer Octal 8-Pin
Mounting Position - Any

Direct Interelectrode Capacitances *

Grid-Number 1 to Plate, maximum	0.003	μμf
Input	6.0	μμf
Output	7.0	μμf

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

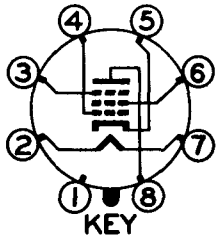
CLASS A_1 AMPLIFIER

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

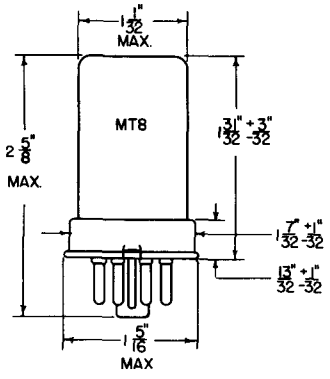


RTMA 8N
BOTTOM VIEW

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

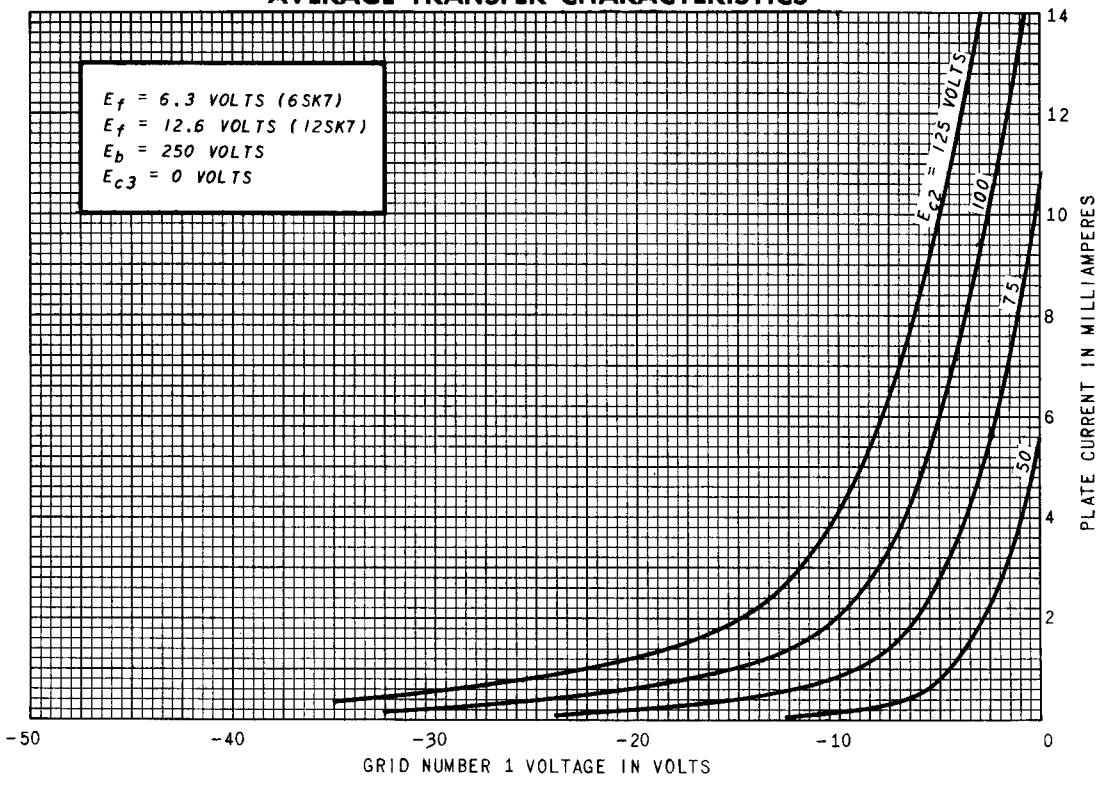


RTMA 8-1

GENERAL ELECTRIC

Supersedes ET-T337A dated 4-50 and ET-T386 dated 5-46

AVERAGE TRANSFER CHARACTERISTICS



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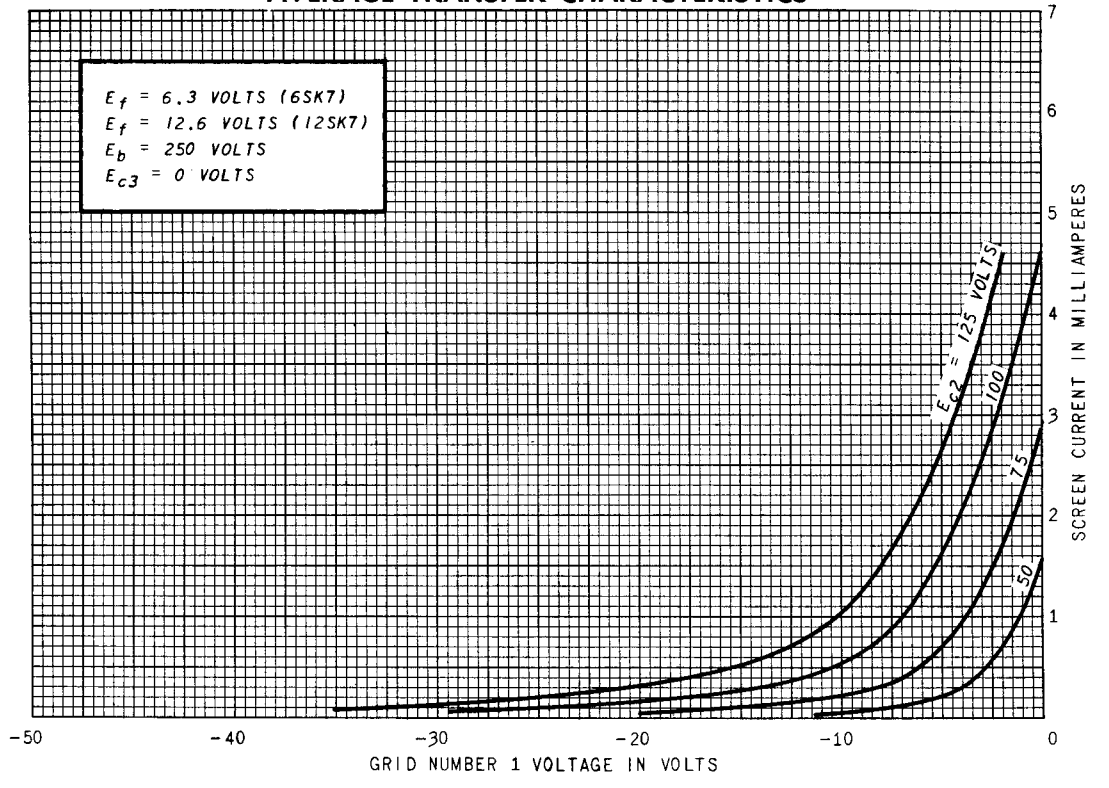
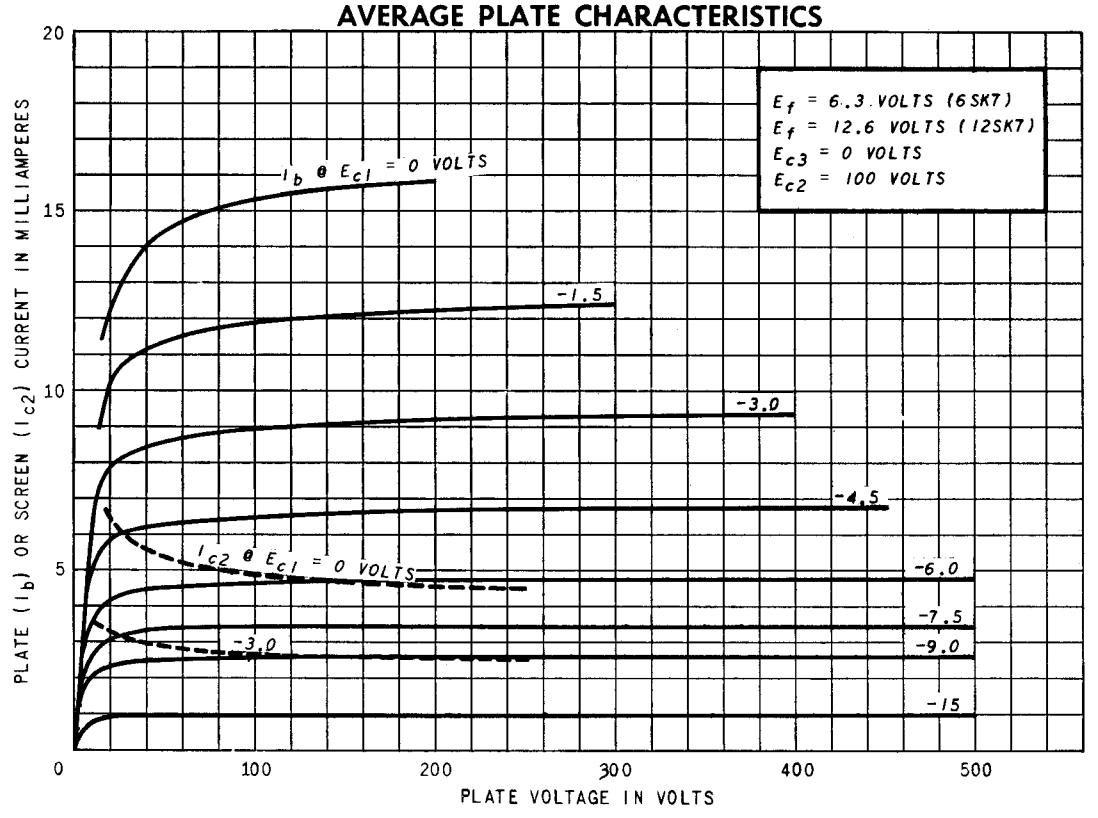
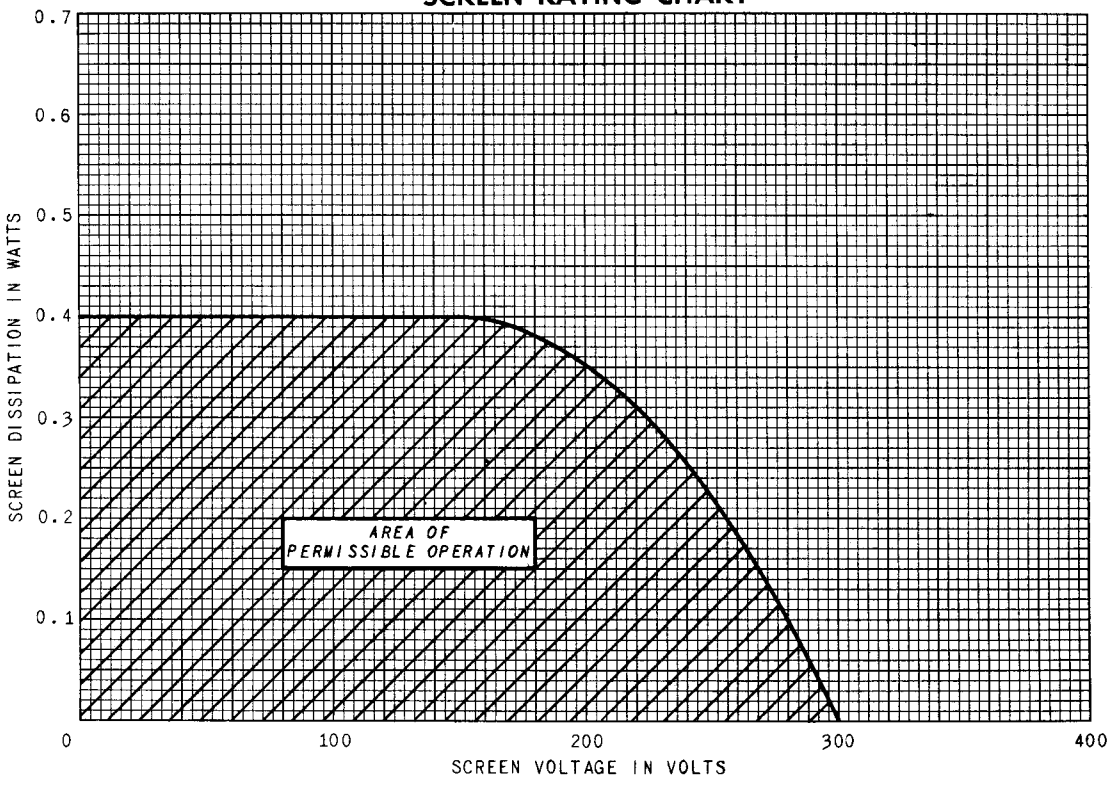


AVERAGE PLATE CHARACTERISTICS



SCREEN RATING CHART



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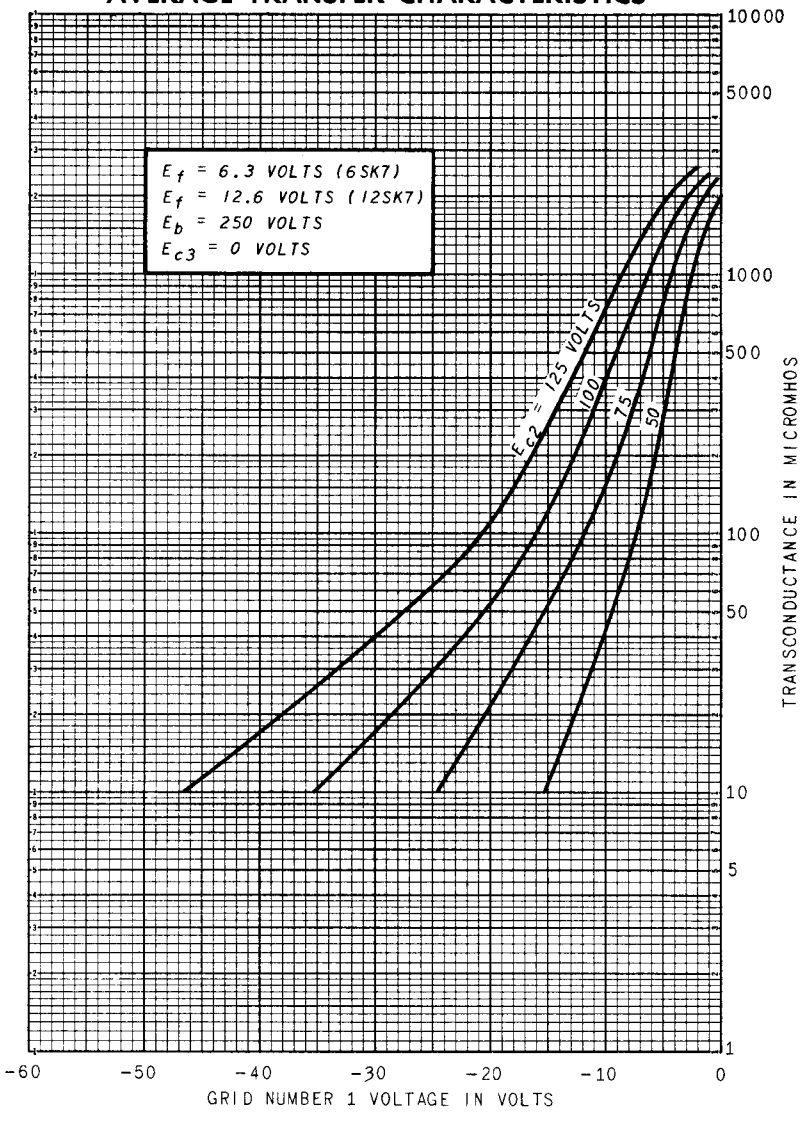

TUBE DEPARTMENT

GENERAL ELECTRIC

Schenectady 5, N. Y.