Electronic TUBE
KEN-RAD

12SF7

Description and Rating

DIODE-PENTODE

GENERAL DESCRIPTION

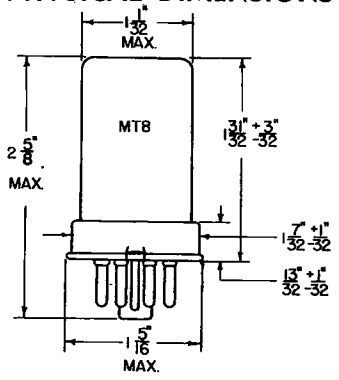
Principal Application: The 12SF7 is a heater-cathode type diode pentode tube designed for use as a detector and intermediate-frequency or audio-frequency amplifier. Except for heater rating the 6SF7 and 12SF7 are identical.

Cathode:	Coated Unipotential
Heater Voltage (A-C or D-C)	12.6 Volts
Heater Current	0.15 Ampere
Envelope:	Metal Shell, MT-8
Base:	B8-21 Small Wafer Octal 8-Pin
Base Material:	Phenolic
Mounting Position:	Any

Direct Interelectrode Capacitances:#

Pentode Unit		
Grid to Plate (Max)	0.004	μμf
Input	5.5	μμf
Output	6.0	μμf
Grid Number 1 to Diode Plate (Max)	0.002	μμf
Pentode Plate to Diode Plate	0.8	μμf

PHYSICAL DIMENSIONS

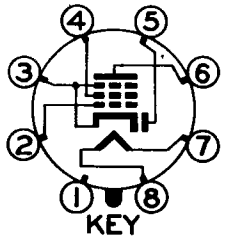


RMA 8-1

TERMINAL CONNECTIONS

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

BASING DIAGRAM



RMA 7AZ
BOTTON VIEW

MAXIMUM RATINGS

	Design Center	Absolute	
Plate Voltage	300	330	Volts
Screen (Grid Number 2) Voltage	100	110	Volts
Screen Supply Voltage	300	330	Volts
External Grid Bias Voltage	Never Positive		
Plate Dissipation	3.50	3.85	Watts
Screen Dissipation	0.50	0.55	Watt
D-C Heater-Cathode Voltage	90	100	Volts
Diode Operation Current	0.9	1.0	Milliampere

CHARACTERISTICS AND TYPICAL OPERATION

CLASS A AMPLIFIER - PENTODE SECTION

Heater Voltage	12.6	12.6	Volts
Plate Voltage	100	250	Volts
Screen Voltage	100	100	Volts
Grid Bias Voltage	-1	-1	Volts
Plate Resistance (Approximate)	0.2	0.7	Megohm

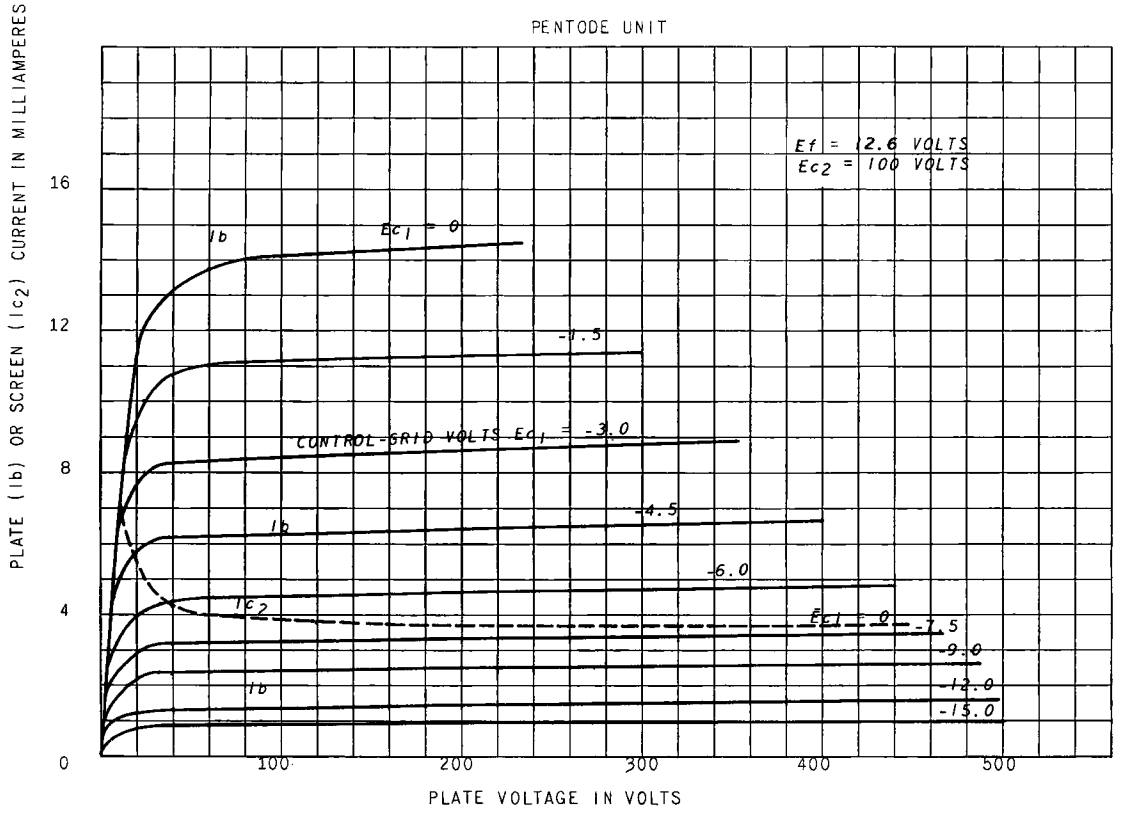
(Continued on page 2)

Transconductance	1975	2050	Micromhos
Grid Bias (Approximate)*	-35	-35	Volts
Plate Current	12	12.4	Milliamperes
Screen Current	3.4	3.3	Milliamperes

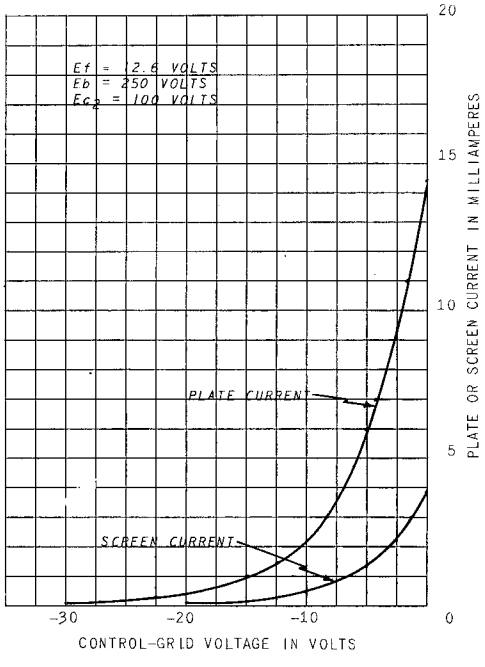
 # With shell connected to cathode.

** For transconductance of 10 micromhos.*

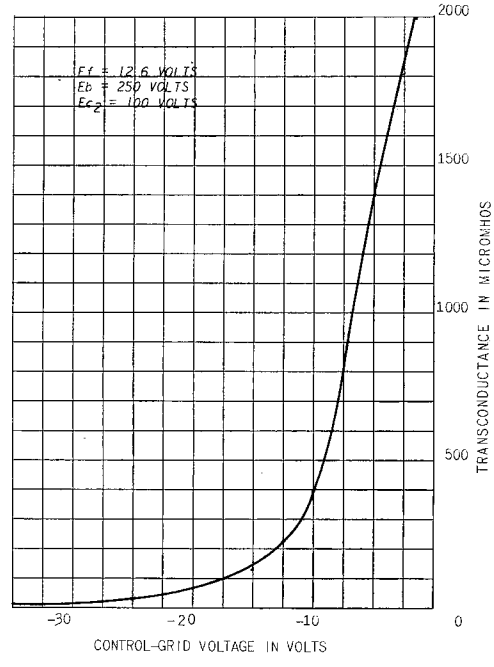
AVERAGE PLATE CHARACTERISTICS



AVERAGE CHARACTERISTICS



AVERAGE CHARACTERISTICS



Electronics Department

GENERAL ELECTRIC

Schenectady, N. Y.