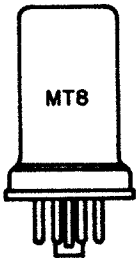
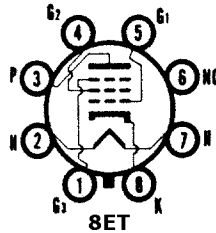


AUDIO POWER AMPLIFIER

6CA7/EL34

Beam Pentode

ConstructionOctal, Metal
BaseOctal 8 Pin
Basing8ET
Outline
Maximum Diameter1.500 In.
Maximum Seated Height3.875 In.
Maximum Overall Height4.438 In.



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage.....	6.3 Volts
Heater Current	1500 Ma
Maximum Heater Cathode Voltage	
Heater Negative with Respect to Cathode	
Total DC and Peak.....	200 Volts
Heater Positive with Respect to Cathode	
DC	100 Volts
Total DC and Peak.....	200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid No. 1 to Plate	1.0 Pf
Input	15.5 Pf
Output	7.2 Pf

RATINGS (Design Center Rating System)

	Triode Conn.	Pentode Conn.
Plate Voltage (Max.)	500	800 Volts
Grid No. 2 Voltage (Max.)	—	425 Volts
Plate Dissipation (Max.)	30	25 Watts
Grid No. 2 Dissipation (Max.)	—	8.0 Watts
Cathode Current (Max.).....	—	150 Ma
Grid No. 1 Circuit Resistance Cathode Bias (Max.) ⁽¹⁾	0.7	0.7 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

	Triode Operation Push-Pull	Pentode Operation Single Tube
Plate Voltage	400	265 300 Volts
Grid No. 2 Voltage	—	250 300 Volts
Cathode Resistor	220	— 190 Ohms
Grid No. 1 Voltage	—	-13.5 — Volts
A-F Grid Voltage (RMS)	—	8.7 8.2 Volts
Zero Signal Plate Current.....	130	100 83 Ma
Max. Signal Plate Current	142	— Ma
Zero Signal Grid No. 2 Current.....	—	15 13 Ma
Transconductance	—	11K — μ mhos
Plate Resistance.....	—	15K — Ohms
Load Resistance	5K	2K 3.5K Ohms
Power Output	16.5	11 11 Watts
Total Harmonic Distortion	3	10 10 Percent

Class AB1 Push-Pull (Pentode Operation)

Plate Voltage	375	450	400 Volts
Grid No. 2 Voltage	375	450	400 Volts
Grid No. 2 Resistor	470	1000	800 Ohms
Grid No. 1 Voltage	—	—	-36 Volts
Cathode Resistor	130	232	— Ohms
A-F Grid Voltage (RMS)	20	27	25 Volts
Zero Signal Plate Current.....	150	120	60 Ma
Maximum Signal Plate Current	188	143	221 Ma
Zero Signal Grid No. 2 Current.....	25	20	9 Ma
Maximum Signal Grid No. 2 Current	39	44	46 Ma
Load Resistance (P to P)	3.5K	6.5K	3.5K Ohms
Power Output	35	40	54 Watts
Total Harmonic Distortion	1.7	5.1	1.6 Percent

Class AB1 Push-Pull (Ultra-Linear Operation)
Grid No. 2 at 43% of Primary Winding

Plate Voltage	430	430 Volts
Cathode Resistor	235	235 Ohms
A-F Grid Voltage (RMS)	17.5	25 Volts
Zero Signal Plate Current.....	125	125 Ma
Maximum Signal Plate Current	130	140 Ma
Zero Signal Grid No. 2 Current.....	20	20 Ma
Maximum Signal Grid No. 2 Current	20.4	28 Ma
Load Resistance (P to P)	6K	6K Ohms
Power Output	20	34 Watts
Total Harmonic Distortion	0.35	2.5 Percent

NOTE:
(1) The maximum permissible limit for Grid No. 1 Resistor in a Class B Circuit is 0.5 Megohm.