

August 15, 1963

AUDIO-OUTPUT BEAM-POWER AMPLIFIER TYPE 35C5

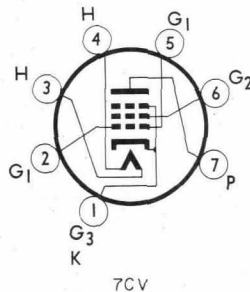
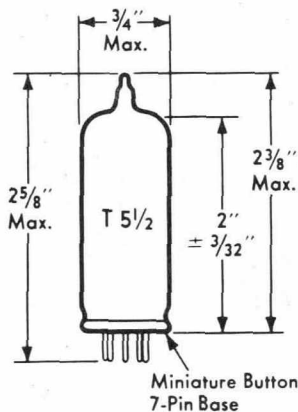
The 35C5 is a 7-pin miniature beam-power pentode type designed for service as the audio output amplifier tube in amplitude-modulated and frequency-modulated receivers and in record players. These types are characterized by high power sensitivity and high plate efficiency at the comparatively low plate and grid 2 voltage normally available in power-transformerless receivers.

ELECTRICAL

Cathode.....	Coated Unipotential
Heater:	
Voltage (ac or dc)	35.0 Volts
Current	0.15 Ampere
Direct Interelectrode Capacitances (Unshielded):	
Grid 1 to Plate	0.6 pf
Input.....	12 pf
Output.....	9 pf

MECHANICAL

Bulb	T-5½
Base	Miniature 7-Pin (JEDEC E7-1)
Outline	.5-3
Basing.....	7CV
Mounting Position	Any



MAXIMUM RATINGS

Design-Maximum Values

Plate Voltage	150 max.	Volts
Grid 2 (Screen) Voltage	130 max.	Volts
Plate Dissipation	5.2 max.	Watts
Grid 2 Dissipation	1.1 max.	Watts
Heater-Cathode Voltage:		
Heater Negative with Respect to Cathode		
Total DC + Peak	200 max.	Volts
Heater Positive with Respect to Cathode		
DC Component	100 max.	Volts
DC + Peak	200 max.	Volts
Bulb Temperature at Hottest Point		
on Bulb Surface (Note 1)	250 max.	°C
Grid 1 Circuit Resistance:		
Cathode Bias Operation.....	0.5 max.	Megohm
Fixed Bias Operation	0.1 max.	Megohm

TYPICAL OPERATION AND CHARACTERISTICS

Plate Voltage	110	Volts
Grid 2 Voltage	110	Volts
Grid 1 (Control Grid) Voltage	-7.5	Volts
Peak AF Grid 1 Voltage	7.5	Volts
Plate Resistance (Approx.)	13000	Ohms
Transconductance	5800	μmhos
Zero Signal Plate Current	40	Ma.
Max. Signal Plate Current	41	Ma.
Zero Signal Grid 2 Current	3	Ma.
Max. Signal Grid 2 Current	7	Ma.
Load Resistance	2500	Ohms
Total Harmonic Distortion	10	Percent
Max. Signal Power Output	1.5	Watts

NOTE

1. High ambient temperature and shielding may necessitate a reduction in operating dissipation. When tube shields are used it is advisable to paint both inside and outside surfaces of the tube shield a dull black and to provide ventilation slots to reduce operating temperature.