

TECHNICAL DATA

ARCTURUS

TYPE 12K7GT MIDGET

REMOTE CUT-OFF PENTODE AMPLIFIER

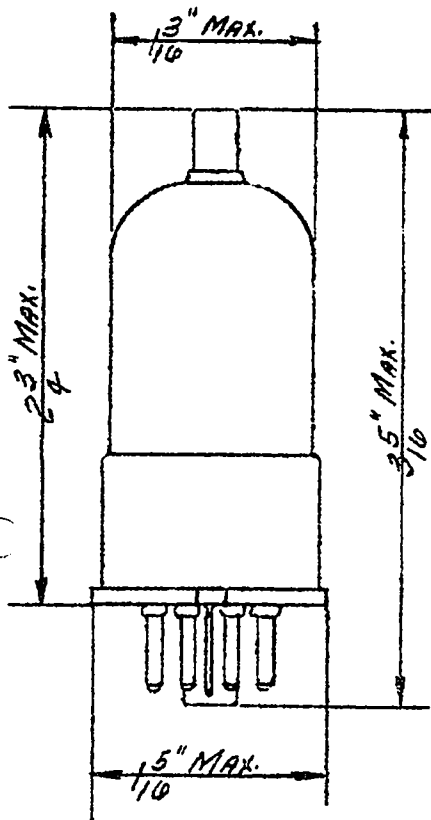
Heater Voltage	12.5	Volts
Heater Current	.150	Ampere

OPERATING CHARACTERISTICS

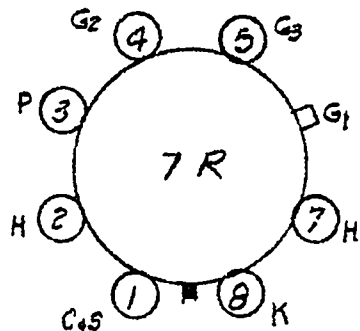
Plate Voltage	100	250	Volts
Screen Grid Voltage	100	100	Volts
Control Grid Voltage	-3	-3	Volts
Plate Current	6.5	7.0	ma.
Screen Grid Current	1.6	1.7	ma.
Plate Resistance	250,000	800,000	Ohms
Transconductance	1325	1450	Microhmhos
Amplification Factor	350	1160	
Control Grid Voltage for transconductance = 2 umhos	-38.5	-42.5	Volts

DIRECT INTERELECTRODE CAPACITANCES

Grid to plate	.005	uuf(max)
Input	4.0	uuf
Output	9.0	uuf



PIN ARRANGEMENT



BOTTOM VIEW

APPLICATION

Type 12K7GT is one of a new line of tubes designed primarily for series heater operation in AC-DC receivers. Through the use of a small resistance connected in series with the heaters the need for plug-in resistors or line cords is eliminated. Only half the heater power for the entire receiver is required compared to designs using .3 ampere types.

JETEC DATA
 JOINT ELECTRON TUBE ENGINEERING COUNCIL
 COMMITTEE ON RECEIVING TUBES

JETEC TYPE 12K7GT

PENTODE



MECHANICAL DATA

Coated unipotential cathode		
Outline drawing	9-18	Bulb T-9
Base	B7-27, small wafer octal 7-pin, metal sleeve	
Top cap	C1-3, skirted miniature	
Maximum diameter1-5/16"	
Maximum overall length3-5/16"	
Maximum seated height	2-3/4"	
Pin connectionsBasing 7R	
Pin 1 - Base sleeve	Pin 5 - Grid #3	
Pin 2 - Heater	Pin 7 - Heater	
Pin 3 - Plate	Pin 8 - Cathode, internal shield	
Pin 4 - Grid #2	Top cap - Grid #1	
Mounting position any		

ELECTRICAL DATA

Direct Interelectrode Capacitances*

Grid to plate: (g1 to p) max.005	μμf
Input: g1 to (h+k+g2+g3+B.S.+i.s.)	4.6	μμf
Output: p to (h+k+g2+g3+B.S.+i.s.)	12	μμf

*External shield #308 connected to pin #8.

Ratings

Heater voltage	12.6	volts
Maximum plate voltage	300	volts
Maximum grid #2 voltage	See J5-C4	
Maximum grid #2 supply voltage	300	volts
Maximum positive dc grid #1 voltage	0	volts
Maximum plate dissipation	2.75	watts
Maximum grid #2 dissipation	0.35	watt
Maximum heater-cathode voltage	90	volts

ELECTRICAL DATA (Continued)Typical Operating Conditions and Characteristics, Class A1 Amplifier

Heater voltage	12.6	12.6'	12.6	volts
Heater current	150	150	150	ma
Plate voltage	100	250	250	volts
Grid #2 voltage	100	100	125	volts
Grid #1 voltage	-1	-3	-3	volts
Grid #3 voltage	Pin #5 connected to Pin #8 at			socket
Plate resistance (approx.)	0.15	0.8	0.6	megohm
Transconductance	1650	1450	1650	μ mhos
Plate current	9.5	7.0	10.5	ma
Grid #2 current	2.7	1.7	2.6	ma
Grid #1 voltage (approx.) for $G_m = 2 \mu$ mhos	-38	-42	-52	volts

Refer to "Interpretation of Receiving Tube Ratings"