

Medium-Mu Triode— Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

With Heater Having Controlled Warm-up Time

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC)	6.3	volts
Current	0.45 ± 6%	amp
Warm-up time (Average)	11	sec

Direct Interelectrode Capacitances:

	<i>Without External Shield</i>	<i>With External Shield[▲]</i>	
<i>Triode Unit:</i>			
Grid to plate	1.5	1.5	μf
Grid to cathode & pentode grid No.3, and heater . .	2	2.4	μf
Plate to cathode & pentode grid No.3, and heater . .	0.5	1	μf
<i>Pentode Unit:</i>			
Grid No.1 to plate.	0.09 max.	0.06 max.	μf
Grid No.1 to cathode & grid No.3, grid No.2, and heater.	4.6	4.8	μf
Plate to cathode & grid No.3, grid No.2, and heater.	0.9	1.6	μf
Pentode grid No.1 to triode plate.	0.05 max.	0.04 max.	μf
Pentode plate to triode plate.	0.05 max.	0.008 max.	μf
Heater to cathode	6.5	6.5 [●]	μf

Characteristics, Class A₁ Amplifier:

	<i>Triode Unit</i>	<i>Pentode Unit</i>		
Plate Voltage	125	100	125	volts
Grid No.3	-	<i>Connected to cathode at socket</i>		
Grid-No.2 Voltage	-	70	125	volts
Grid-No.1 Voltage	-1	-	-1	volt
Amplification Factor.	40	-	-	
Plate Resistance (Approx.) . . .	6000	-	30000	ohms
Transconductance.	6500	5700	5500	μmhos
Plate Current	12	-	9	ma
Grid-No.2 Current	-	-	2.2	ma
Grid-No.1 Voltage (Approx.) for plate μa = 20	-7	-	-6.5	volts

▲ Indicates a change.

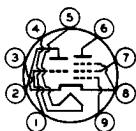


6CG8-A

Mechanical:

Operating Position. Any
 Maximum Overall Length. 2-3/16"
 Maximum Seated Length 1-15/16"
 Length, Base Seat to Bulb Top (Excluding tip). . 1-9/16" ± 3/32"
 → Diameter. 0.750" to 0.875"
 Dimensional Outline See *General Section*
 Bulb. T6-1/2
 Base. Small-Button Noval 9-Pin (JEDEC No.E9-1)
 Basing Designation for BOTTOM VIEW. 9GF

Pin 1 - Triode Grid
 Pin 2 - Triode Plate
 Pin 3 - Cathode
 Pin 4 - Heater
 Pin 5 - Heater
 Pin 6 - Pentode Plate



Pin 7 - Pentode
 Grid No.2
 Pin 8 - Pentode
 Grid No.3,
 Cathode
 Pin 9 - Pentode
 Grid No.1

AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

	<i>Triode Unit</i>	<i>Pentode Unit</i>
PLATE VOLTAGE	275 max.	275 max. volts
GRID No.3 (SUPPRESSOR GRID)	-	<i>Connect to cathode at socket</i>
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE.	-	275 max. volts
GRID-No.2 VOLTAGE	-	<i>See Grid-No.2 Input</i>
<i>Rating Chart at front of Receiving Tube Section</i>		
GRID-No.1 (CONTROL-GRID) VOLTAGE:		
Positive-bias value	0 max.	0 max. volts
GRID-No.2 INPUT:		
For grid-No.2 voltages up to 137.5 volts	-	0.45 max. watt
For grid-No.2 voltages between 137.5 and 275 volts	-	<i>See Grid-No.2 Input</i>
<i>Rating Chart at front of Receiving Tube Section</i>		
PLATE DISSIPATION	1.7 max.	2.3 max. watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode.	200 max.	200 max. volts
Heater positive with respect to cathode.	200* max.	200* max. volts

▲ With external shield JEDEC No.315 connected to cathode except as noted.

● With external shield JEDEC No.315 connected to pentode plate.

* The dc component must not exceed 100 volts.

Curves shown under Type 6X8 also apply to the 6CG8-A

→ Indicates a change.

